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ABSTRACT

This task-based curriculum guide for building and home maintenance services is intended to help the teacher develop a classroom management system where students learn by doing. Introductory materials include a Dictionary of Occupational Titles job code and title sheet, a career ladder, a matrix relating duty/task numbers to job titles, and a task list. Each task is then outlined in this format: statement of duty, statement of task, duty and task numbers, a checklist of achievement indicators, a statement of the criteria for achievement of competence, specification of required tools and equipment and resources, and lists of teacher activities and student learning activities. The tasks are categorized by 13 duties: operating and maintaining equipment, caring for resiliant and nonresiliant floors, caring for carpeted floors, maintaining surfaces, performing laundry operations, performing building repairs, performing plumbing repairs, performing electrical repairs, maintaining grounds, operating temperature controls, performing management functions, maintaining facilities, and using employability skills. Other contents include student and class achievement records, tool/equipment lists, and a bibliography. (YLB)

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BUILDING and HOME MAINTENANCE SERVICES

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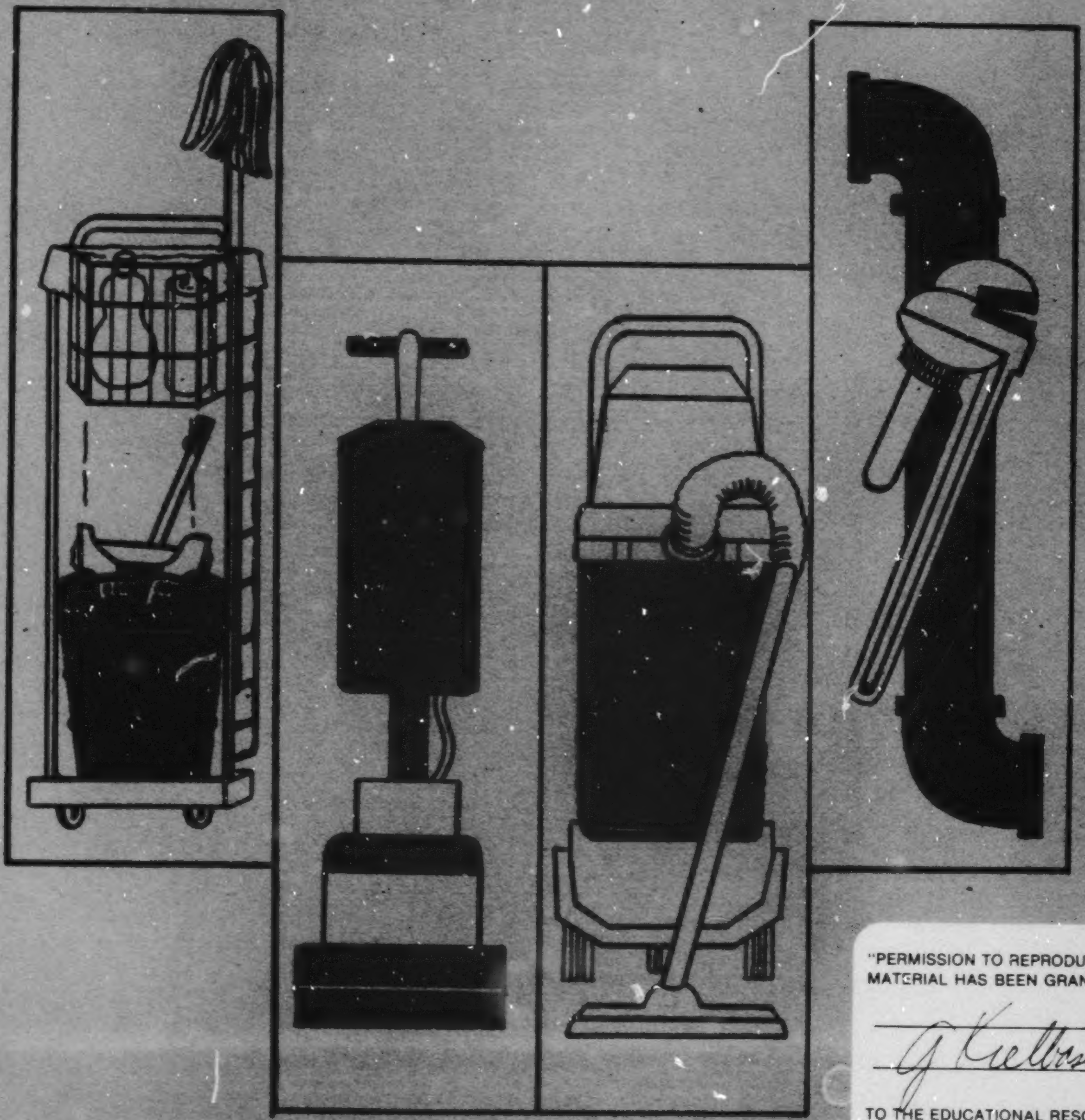

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INTRODUCTION

This curriculum is representative of the tasks that employees in Building and Home Maintenance Occupations perform. It was developed through a grant awarded to the Department of Agricultural and Extension Education (AEE), College of Agriculture and Natural Resources, Michigan State University, by the Vocational-Technical Education Service, Michigan Department of Education.

Teachers can use this guide, which is based on task analysis, as a reference. For example, the job matrix, task curriculum sheets, student/classroom achievement recording forms and the examples of teacher-student activities (adapted from The Skills of Teaching, Carkhuff and Berenson) that are included behind the first task in each duty category were specifically designed to facilitate identification of program content and the structuring of a classroom management system.

The credit for this curriculum belongs to:

1. The V-TES/MDE Consultant who provided overall guidance for the project. This responsibility included selecting an educator-curriculum writer to develop the guide, nominating educators to function as reviewers of the materials and working with AEE staff to determine the direction for the final curriculum product.

2. The Educator-Curriculum Writer who developed the curriculum. This person analyzed labor market data and utilized various references, resources and professional expertise to write the curriculum materials.

3. The Curriculum Task Force that reviewed the materials. The Task Force, which was composed of secondary and post-secondary educators, critiqued the task statements and job titles, edited the materials and suggested appropriate changes.

4. Employers and employees from Michigan's business and industry sector who participated in a Task Analysis Survey. They assisted with validating the curriculum by identifying job titles, tasks performed on the job and tools and equipment.

5. The Project Coordinator and Staff who facilitated the curriculum project. Working in close collaboration with the V-TES/MDE Consultant, they developed the curriculum format, provided resources, references and technical assistance to the curriculum writer and were responsible for maintaining a production schedule for the final curriculum product.

6. Finally, without the assistance of the secretaries and staff who typed and proofread the final product, this effort would never have been completed.

It is intended by all those involved in the development of this curriculum guide that it be used to (1) provide relevant training for entry to the world of work and (2) provide educational experiences that will enable students to pursue advanced studies in Building and Home Maintenance occupations. It is hoped that this curriculum is used to these ends.

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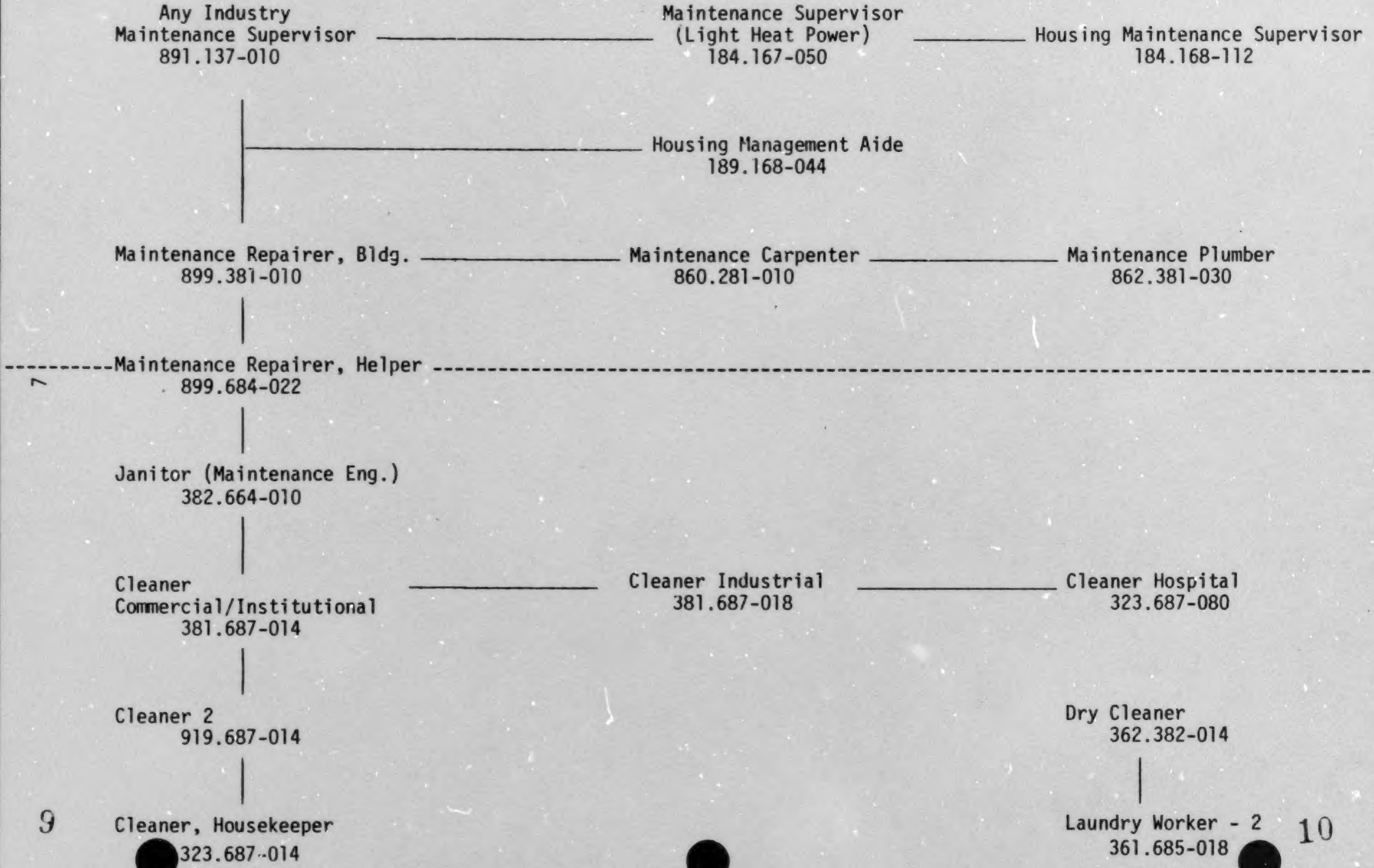
D.O.T. JOB CODE AND TITLE SHEET

BUILDING AND HOME MAINTENANCE SERVICES

D.O.T. NUMBER	JOB TITLE
919.687-014	Cleaner 2
323.687-010	Cleaner, Hospital
381.687-014	Cleaner, Commercial or Institutional
381.687-018	Cleaner, Industrial
382.664-010	Janitor (Maintenance Engineer)
323.687-014	Cleaner, Housekeeper
361.685-018	Laundry Worker 2
899.684-022	Maintenance Repairer Helper (Factory or Mill)
899.381-010	Maintenance Repairer, Building
362.382-014	Dry Cleaner
860.281-010	Maintenance - Carpenter

CAREER LADDER

BUILDING AND HOME MAINTENANCE SERVICES



Any Industry
Maintenance Supervisor
891.137-010

Maintenance Supervisor
(Light Heat Power)
184.167-050

Housing Maintenance Supervisor
184.168-112

Housing Management Aide
189.168-044

Maintenance Repairer, Bldg.
899.381-010

Maintenance Carpenter
860.281-010

Maintenance Plumber
862.381-030

Maintenance Repairer, Helper
899.684-022

Janitor (Maintenance Eng.)
382.664-010

Cleaner
Commercial/Institutional
381.687-014

Cleaner Industrial
381.687-018

Cleaner Hospital
323.687-080

Cleaner 2
919.687-014

Dry Cleaner
362.382-014

Cleaner, Housekeeper
323.687-014

Laundry Worker - 2
361.685-018

DUTY/TASK - JOB MATRIX

DUTY/TASK NUMBERS \ JOB TITLES	Cleaner, Hospital	Cleaner, Commercial/ Institutional	Cleaner, Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repairer Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance, Carpenter	Maintenance, Plumber	*General House Worker	*Housing Manage. Supervisor/Aide	*Maintenance Supervisor (Any Area)	*Maintenance Sup. (Light, Heat, Power)		
A - 1	X	X	X	X	X	X	X	X	X	X	X	X	X					
2	X	X	X	X	X	X		X	X				X					
3	X	X	X	X	X	X							X					
4	X	X		X		X												
5	X	X	X	X		X												
6	X	X	X	X	X	X		X	X		X	X						
7		X		X	X	X							X					
8	X	X	X	X		X												
9		X		X		X												
10	X	X	X	X	X	X	X			X			X					
11		X	X			X		X										
12			X			X												
13						X	X			X								
14							X			X								
15					X		X			X								
16							X			X								
17	X	X	X	X	X	X		X	X		X	X	X					
18	X	X	X	X	X	X	X	X	X	X	X	X	X					
19								X	X		X	X						

DUTY/TASK JOB MATRIX

DUTY/TASK NUMBERS / JOB TITLES	Cleaner, Hospital	Cleaner, Commercial/ Institutional	Cleaner, Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repairer Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance, Carpenter	Maintenance, Plumber	*General House Worker	*Housing Manage. Supervisor/Aide	*Maintenance Supervisor (Any Area)	*Maintenance Sup. (Light, Heat, Power)		
A - 20						X		X	X			X						
21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
B - 1	X	X	X	X	X	X							X	X	X	X		
2	X	X	X	X		X												
3	X	X	X	X	X	X							X					
4	X	X	X	X		X												
5	X	X	X	X	X	X							X					
6	X	X	X	X		X												
7	X	X	X	X		X												
8	X	X	X	X	X	X							X					
C - 1	X	X	X	X	X	X							X					
2	X	X	X	X	X	X							X					
3	X	X	X	X	X	X							X					
4	X	X	X	X	X	X							X					
5	X	X	X	X	X	X							X					
6	X	X	X	X	X	X							X					

DUTY/TASK - JOB MATRIX

DUTY/TASK NUMBERS / JOB TITLES	Cleaner, Hospital	Cleaner, Commercial/ Institutional	Cleaner, Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repairer Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance, Carpenter	Maintenance, Plumber	*General House Worker	*Housing Manage. Supervisor/Aide	*Maintenance Supervisor (Any Area)	*Maintenance Sup. (Light, Heat, Power)		
D- 1	X	X	X	X	X	X							X	X	X	X		
2	X	X	X	X	X	X							X					
3	X	X	X	X	X	X							X					
4	X	X	X	X	X	X							X					
5	X	X	X	X	X	X							X					
6	X	X	X	X	X	X							X					
7	X	X	X	X	X	X							X					
8	X	X	X	X	X	X							X					
9					X								X					
10	X	X	X	X	X	X							X					
11	X	X	X	X	X	X							X					
12	X	X	X		X													
13	X																	
14	X	X	X	X	X	X							X					
15	X	X		X									X					
16	X	X	X	X	X	X							X					
17	X	X	X	X														
18	X	X	X			X												
19	X	X	X															

DUTY/TASK–JOB MATRIX

JOB TITLES DUTY/TASK NUMBERS	Cleaner, Hospital	Cleaner, Commercial/ Institutional	Cleaner Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repair Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance Carpenter	Maintenance Plumber	General House Worker	Housing Manager Supervisor/Aide	Maintenance Supervisor (Any Area)	Maintenance Sup. (Light, Heat, Power)
D - 20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21	X	X	X	X	X	X		X	X				X			
E - 1							X			X						
2							X			X						
3							X			X						
4						X	X			X						
5						X	X			X						
6							X			X						
7							X			X						
8						X	X			X						
F - 1						X		X	X		X	X		X	X	
2						X		X	X		X					
3						X		X	X		X					
4						X		X	X		X					
5								X	X							
6						X		X	X							
7								X	X		X					

DUTY/TASK - JOB MATRIX

JOB TITLES / DUTY/TASK NUMBERS	Cleaner, Hospital	Cleaner, Commercial/Institutional	Cleaner Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repair Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance Carpenter	Maintenance Plumber	General House Worker	Housing Manager Supervisor/Aide	Maintenance Supervisor (Any Area)	Maintenance Sup. (Light, Heat, Power)	
F - 8						X		X	X								
9						X		X	X								
10						X		X	X								
11						X		X	X				X				
12						X		X	X			X					
13						X		X	X			X					
14						X		X	X			X					
15						X		X	X								
16						X		X	X								
17						X		X	X								
18						X		X	X								
20						X											
G - 1						X		X	X			X				X	
2						X		X	X			X				X	
3								X	X			X				X	
4								X	X			X				X	
5						X		X	X			X				X	
								X	X			X				X	

DUTY/TASK JOB MATRIX

JOB TITLES / DUTY/TASK NUMBERS	Cleaner, Hospital	Cleaner, Commercial/ Institutional	Cleaner Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repair Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance Carpenter	Maintenance Plumber	General House Worker	Housing Manager Supervisor/Aide	Maintenance Supervisor (Any Area)	Maintenance Sup. (Light, Heat, Power)		
G - 7						X		X	X			X				X		
8						X		X	X			X				X		
9						X		X	X			X				X		
10									X			X				X		
11												X				X		
12												X				X		
13												X				X		
14												X				X		
15												X				X		
H - 1								X	X							X		
2						X		X	X							X		
3						X		X	X							X		
4						X		X	X							X		
5						X		X	X							X		
6						X		X	X							X		
7						X		X	X							X		
8									X							X		
9									X							X		

DUTY/TASK - JOB MATRIX

DUTY/TASK NUMBERS / JOB TITLES	Cleaner Hospital	Cleaner, Commercial/ Institutional	Cleaner Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repair Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance Carpenter	Maintenance Plumber	General House Worker	Housing Manager Supervisor/Aide	Maintenance Supervisor (Any Area)	Maintenance Sup. (Light, Heat, Power)	
H - 10									X							X	
I - 1						X											
2						X											
3						X											
4						X											
5						X											
6						X											
7						X											
8						X											
9						X											
10						X											
11						X											
J - 1						X	X	X	X	X		X		X	X	X	
2						X	X	X	X	X		X		X	X	X	
K - 1														X	X	X	
															X	X	

DUTY/TASK JOB MATRIX

DUTY/TASK NUMBERS \ JOB TITLES	Cleaner, Hospital	Cleaner, Commercial/ Institutional	Cleaner Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repair Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance Carpenter	Maintenance Plumber	General House Worker	Housing Manager Supervisor/Aide	Maintenance Supervisor (Any Area)	Maintenance Sup. (Light, Heat, Power)		
K - 3															X	X		
4									X		X	X			X	X		
5						X								X	X	X		
6														X	X	X		
7														X	X	X		
8														X	X	X		
9						X								X	X	X		
10														X	X	X		
11						X			X					X	X	X		
L - 1				X	X								X					
2			X			X												
3	X	X		X		X												
4		X				X							X					
5				X		X												
6		X		X		X												
7	X	X		X		X							X					
M - 1	X	X	X	X	X	X	X	X	X	X	X	[illegible]	X	X	X	X		

DUTY/TASK - JOB MATRIX

DUTY/TASK NUMBERS

JOB TITLES	Cleaner, Hospital	Cleaner, Commercial/ Institutional	Cleaner Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repair Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance Carpenter	Maintenance Plumber	General House Worker	Housing Manager Supervisor/Aide	Maintenance Supervisor (Any Area)	Maintenance Sup. (Light, Heat, Power)		
M - 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
[illegible]	X	X	X	X	X	X	X	X	X	[illegible]	X	X	X	X	X	X		

DUTY/TASK JOB MATRIX

DUTY/TASK NUMBERS

JOB TITLES	Cleaner, Hospital	Cleaner, Commercial/ Institutional	Cleaner Industrial	Cleaner, 2	Cleaner, Housekeeper	Janitor (Maint. Eng.)	Laundry Worker, 2	Maintenance Repair Helper	Maintenance Repairer, Bldg	Dry Cleaner	Maintenance Carpenter	Maintenance Plumber	General House Worker	Housing Manager Supervisor/Aide	Maintenance Supervisor (Any Area)	Maintenance Sup. (Light, Heat, Power)	
M - 21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

TASK LIST
FOR
BUILDING AND HOME MAINTENANCE SERVICES

A. OPERATING AND MAINTAINING EQUIPMENT

1. Select equipment and tools/products, using knowledge of it's function and/or principle of operation, to set up job steps.

2. Use brooms, using appropriate techniques, to clean a surface.

3. Use dust and wet mops, using appropriate equipment and products, to clean surfaces.

4. Set-up a housekeeping/custodial cart, using knowledge of maintenance schedule/routine, to supply worker(s) for cleaning operations.

5. Operate automatic scrubbing machine, using appropriate accessories and products, to clean a floor.

6. Operate wet/dry vacuum, using appropriate accessories, to clean surfaces.

7. Operate an upright vacuum, using appropriate procedures and attachments, to clean carpet and upholstery.

8. Operate floor buffing and scrubing machine(s), using appropriate procedures, products, and mixtures, to clean/maintain floors.

9. Operate hot water extraction equipment, uisng appropriate products and mixtures, to clean carpet and upholstery.

10. Use product proportioner, using given mixture ration, products, and solutions, to mix solvents, waxes, and sealers.

11. Operate a caddy vacuum (back pack vacuum), using appropriate accessories, to clean interior ane exterior building surfaces.

12. Operate a power washer, using knowledge of setup and safety procedures, accessories and fluid mixtures, to clean surfaces.

13. Operate a commercial washer and dryer, using knowledge of appropriate cycles, detergent and additive solutions, and temperature settings, to clean clothing, linens, or other washable fabrics.

14. Operate a flat iron, using appropriate temperature settings and operation procedures, to remove wrinkles from fabrics.

15. Operate a steam/dry iron, using knowledge of fabrics, temperature requirements and operation procedures, to remove wrinkles.

16. Operate a patching machine, using knowledge of operational and safety procedure, to patch clothing and linens.

A. OPERATING AND MAINTAINING EQUIPMENT (continued)

17. Operate hand tools, using knowledge of their function, principle of operation, and safety procedures, to layout, cut, fasten, shape, or finish materials.

18. Operate power tools, using knowledge of their function, principles of operation, and safety equipment, to cut, shape, fasten, or finish materials.

19. Use fasteners/hardware/adhesives, using knowledge of tools, procedures and safety requirements, to join materials.

20. Operate a power auger, using accessories, to unclog waste pipe.

21. Store tools and material, using knowledge of inventory policies, safety standards, and laboratory organization, to maintain an efficient/safe operation.

B. CARING FOR RESILIANT AND NONRESILIANT FLOORS

1. Identify floors, using knowledge of floor types, to setup for cleaning and care.

2. Wet scrub floors, using appropriate machine, accessories, and solutions, to remove dirt and marks.

3. Strip a floor, using knowledge of procedures, and products, to finish a floor surface.

4. Seal a floor, using knowledge of equipment procedures and products, to finish a floor surface.

5. Wax a floor, using knowledge of equipment, procedures, and commercial products, to coat a floor surface.

6. Finish a floor, using knowledge of procedures and equipment operation, to shine floor surface.

7. Spray-buff a floor, using a buffing machine, accessories, and spray buff products, to shine a floor surface.

8. Maintain floor finishes, using wet and dry mopping, to clean surface.

C. CARING FOR CARPETED FLOORS

1. Remove carpet stains, using appropriate products, product mixtures, and application techniques, to clean stained area.

2. Spot clean carpets, using knowledge of products, product mixtures, and application techniques, to clean carpeted area.

3. Vacuum carpet, using a vacuum cleaner, appropriate settings, and accessories, to remove dirt.

C. CARING FOR CARPETED FLOORS (continued)

4. Shampoo carpet, using knowledge of product, product proportions, and procedures, to clean carpeted areas.

5. Clean carpet by extraction, using knowledge of equipment setup and operation product and product proportions, and procedures, to remove dirt and stains.

6. Clean carpet with roto floor machine, using knowledge of setup and operations, related products and proportions, and procedures, to remove dirt and stains.

D. MAINTAINING SURFACES

1. Follow cleaning schedule, using knowledge of job steps and building traffic, to meet daily, weekly, and monthly needs.

2. Clean glass surfaces, using cleaning mixtures, to remove dirt.

3. Wash windows, using knowledge of equipment operations, products, and proportions, and procedures, to remove dirt.

4. Clean leather surfaces, using cleaning mixtures, conditioners, and knowledge of product application, to cleanse surface.

5. Clean wood, using knowledge of products, production application, and equipment procedures, to cleanse surface.

6. Clean porcelin, using cleaning products, germicides, and knowledge of application procedures, to disinfect surface.

7. Dust walls, ceilings, and fixtures, using appropriate equipment and procedures, to clean surfaces.

8. Wash walls and ceilings, using appropriate equipment, products, and product preparation and proportions, to clean surfaces.

9. Clean appliances, using appropriate supplies, products, or procedures to maintain interior/exterior surfaces.

10. Clean and replenish dispensers, using knowledge of procedures to dissmantle and assemble dispensers and product information maintain supply.

11. Remove graffiti, using knowledge of products and procedures, to clean/cover marking.

12. Disinfect surfaces, using germicide products and cleaning procedures, to maintain health and safety standards.

13. Maintain germ free environment, using knowledge of products and product application, and isolation/sterilization procedure, to protect personal health.

D. MAINTAINING SURFACES (continued)

14. Collect and empty trash, using appropriate equipment to transport and store debris, to maintain clean environment.

15. Demonstrate bedmaking, using appropriate linens, blankets, and folding techniques, to change a bed.

16. Clean upholstered surfaces, using knowledge of shampooing and extraction methods, to remove dirt and stains.

17. Clean stairs, using brooms, mop, cleaning products, and floor finisher, to maintain surface.

18. Clean water fountains, using cleaning and disinfecting products, to maintain appearance.

19. Clean sand and dry urns, using replacement products and disposal techniques, to remove debris.

20. Report repair needs/hazards, using proper communication system and/or forms, to maintain building safety.

21. Clean light fixtures, using knowledge of disassembly/assembly procedure and basic safety procedures, to remove dirt and dust.

E. PERFORMING LAUNDRY OPERATIONS

1. Pretreat and remove stains, using knowledge of fabric requirements and products, to prepare for laundering.

2. Sort laundry, using knowledge of fabric and laundering procedures, to prepare for cleaning.

3. Make minor repairs, using sewing or patching machines as other commercial mending products, to mend fabric.

4. Wash fabric, using knowledge of fabric requirements, equipment operating procedures, and product information, to clean fabric.

5. Dry laundry, using knowledge of fabric requirements, equipment operating procedures, and temperature settings, to prepare for storage.

6. Fold laundry, using manual or machine method, to store/package laundry.

7. Press laundry, using flat, steam, or dry iron, to prepare for folding/storage.

8. Store solutions and soaps, using proper containers and safety procedures to maintain safe environment.

F. PERFORMING BUILDING REPAIRS

1. Measure/calculate materials, using mathematical computation, incremented devices, and knowledge of material standards, to indicate layout steps.

F. PERFORMING BUILDING REPAIRS (continued)

2. Patch holes in plastered walls, using patching compound, application knife, and proper finishing procedures, to repair surface.

3. Repair damaged ceiling tile, using proper replacement material and fastener, to replace damaged tiles.

4. Repair damaged floor tile, using appropriate replacement materials, adhesive, and tools, to replace tile.

5. Repair carpet, using proper tools and seaming procedures, to mend/replace material.

6. Repair windows, using knowledge of assembly/disassembly and installation procedures, to rebuild operating mechanism and replace parts.

7. Replace windows, using knowledge of manufacturer's recommended disassembly procedures, appropriate tools, and equipment, to install pane.

8. Repair a screen, using knowledge of patching technique and products, to mend holes.

9. Replace screen, using appropriate replacement and gasket materials, to install new screen in frame.

10. Repair pain on interior and exterior surfaces, using knowledge of surface preparation and application procedures, to refinish surface.

11. Maintain heating and cooling system, by adjusting unit and following cleaning and/or filter replacement schedule, to insure efficient operation.

12. Repair/install locksets, using knowledge of installation and assembly instruction, to replace/adjust mechanism.

13. Repair furniture, using proper glueing, mending, or refinishing procedures, to mend damage.

14. Repair drywall, using proper installation and finishing procedures, to fix damaged wall/ceiling surfaces.

15. Repair/install paneling, using proper layout and cutting tools, adhesives/fasteners, and installation procedures, to replace damaged section.

16. Apply/repair wallpaper, using paste or repair adhesive, appropriate tools, and materials, to match existing pattern.

17. Repair doors/jambs, using knowledge of installation procedures and tool operation, to adjust/replace defective material.

18. Apply pesticides, using proper equipment and product proportions, to eliminate insect population.

F. PERFORMING BUILDING REPAIRS (continued)

19. Control rodents, using traps, chemical and/or building repair procedur to reduce/eliminate rodent population.

G. PERFORMING PLUMBING REPAIRS

1. Identify pipe sizes and schedules, using knowledge of standard sizes and inside and outside dimensions, to order/purchase piping.

2. Identify fitting, using knowledge of schedule, angles, metals, and compiling procedures, to select proper fitting for installation.

3. Cut pipe, using knowledge of pipe sizes and schedules and proper cutting and reaming tools, to prepare pipe for fitting.

4. Join pipe, using knowledge of sweating, threading, solvent and welding procedures and tools, to join pipe sections.

5. Replace seal washers, using knowledge of tools, equipment and assembly/disassembly procedures, to rebuild faucet.

6. Install watercloset, using proper fitting tools and seals, to insure proper operation.

7. Install sink, using knowledge of waste pipe and fitting sizes, tools and installation clips, to hook up and seal sink.

8. Repair faucets, using proper tools, replacement parts, and knowledge of assembly and disassembly procedures, to stop leaks.

9. Repair ball-type flush valve, using proper tool procedures and replacement parts, to restore/insure efficient operation.

10. Repair diaphragm flush valve, using proper tools, procedures, and replacement parts, to restore efficient operation.

11. Repair a water heater, using knowledge of startup and shut-down procedures, safety requirements, and principles of operation, to insure equipment operation.

12. Repair a drinking fountain, using knowledge of plumbing, electrical and refrigeration principles, to insure efficient operation.

13. Repair a disposal, using knowledge of plumbing and electrical principles, and installation procedures, to insure efficient operation.

14. Unclog drains and traps, using hand and mechanical equipment, chemicals and/or knowledge of pipe and fitting installation, to clean blockage.

15. Install waste pipe system, using knowledge of standard sizes, fittings, and coupling techniques, to insure system flow.

H. PERFORMING ELECTRICAL REPAIRS

1. Select electrical tools and materials, using knowledge of circuit components, tool/equipment function, and principle of operations, to set up job requirements.

2. Practice electrical safety procedures, using knowledge of basic safety rules and electrical principles, to maintain safe environment and work area.

3. Replace plugs on electrical cords, using approved replacement parts and installation procedures, to wire connections.

4. Install single pole switches and receptacles, using knowledge of electrical principles, using diagram and approved equipment and procedures, to connect fixture.

5. Replace fluorescent light, using proper assembly/disassembly and installation procedures, to install fixture.

6. Install 3-way light switches and fixture, using knowledge of wiring diagrams, approved materials and electrical wire types, to connect switches and fixtures.

7. Wire pig tail, using knowledge of plug types and connectors, to install wire and plug.

8. Wire breaker/panel, using knowledge of service requirements and electrical principles, to install components.

9. Wire electric motors, using knowledge of electrical principles and wiring diagrams, to insure efficient operation.

10. Troubleshoot circuits, using knowledge of test equipment, electrical principles and using diagrams, to diagnose/correct problem.

I. MAINTAINING GROUNDS

1. Cut lawn, using cutting, trimming, and cleanup equipment, to maintain lawn.

2. Seed lawn, using knowledge of grass and application requirements and spreading equipment, to grow grass.

3. Apply weed killer, using knowledge of product proportions and application procedures/requirements, to kill weeds.

4. Water lawn, using automatic and manual watering systems, to maintain lawn.

5. Fertilize lawn, using knowledge of product proportions, application procedures, and turf requirements, to maintain grounds.

I. MAINTAINING GROUNDS (continued)

6. Clean parking area, using debris and/or snow removal equipment, to maintain parking surfaces.

7. Prune large trees, using appropriate equipment and methods, to maintain/improve plant health/appearance.

8. Prune deciduous shrubs, using appropriate equipment and methods, to maintain/improve plants health/appearance.

9. Prune narrow leaf evergreens, using appropriate equipment and methods, to maintain and improve plants health and appearance.

10. Prune broad leaf evergreen, using appropriate equipment and methods, to maintain/improve plants health/appearance.

11. Prune hedges, using appropriate equipment and methods, to maintain/improve hedges health/appearance.

J. OPERATING TEMPERATURE CONTROLS

1. Operate electric temperature controls, using knowledge of setting requirements and energy managements, to operate equipment.

2. Operate pneumatic temperature controls, using knowledge of system flow and setting requirements, to operate equipment.

K. PERFORMING MANAGEMENT FUNCTIONS

1. Control inventory, using knowledge of invoicing and stock management procedures, to maintain supplies.

2. Supervise staff, using knowledge of employee job responsibilities, evaluation procedures, and building needs, to manage staff.

3. Plan work schedule, using knowledge of staff and building needs, to organize maintenance and staff schedule.

4. Demonstrate troubleshooting techniques, using knowledge of equipment and systems operations, to adjust/diagnose/locate defective part.

5. Order supplies and materials, using knowledge of product information, requisitions, and purchasing procedures, to maintain stock.

6. Assign work schedule, using single and/or multi-building communications system, to disseminate weekly work/maintenance schedule.

7. File records, using alphabetical and/or numerical system, to maintain files.

8. Check/evaluate work completed, using knowledge of job tasks, health and safety standards, and equipment operations, to supervise building operations.

9. Record messages, using proper form(s) and routing procedures, to initiate delivery.

K. PERFORMING MANAGEMENT FUNCTIONS (continued)

10. Operate office equipment, using appropriate procedures, manuals, and business forms, to record/calculate information.

11. Complete paperwork, using basic grammar and spelling skills, and knowledge of purpose and destination, to record, information.

L. MAINTAINING FACILITIES

1. Maintain a residence, using knowledge of hand- and power equipment cleaning products, building meterials, and installation and repair procedures, to clean/repair facility.

2. Maintain industrial facilities, using knowledge of surface, equipment, and system needs, to clean/maintain building and components.

3. Maintain health care facilities, using knowledge of cleaning/disinfecting procedures, patient relations, and isolation techniques, to insure health and safety standards.

4. Maintain hospitality facilities, using appropriate equipment, products, and procedures, to meet building needs.

5. Maintain educational facility, using knowledge of maintenance schedule, equipment operations, and calendar of events, to meet building needs.

6. Maintain a commercial/business facility, using knowledge of cleaning requirements and building operation, to meet building and occupant needs.

7. Maintain public buildings, using knowledge of maintenance schedule, equipment operations, and calendar of events, to meet building needs.

M. USING EMPLOYABILITY SKILLS

1. Perform a self-assessment, using knowledge and information, to compile a list of personal attributes.

2. Perform a self-assessment, using knowledge and information, to identify areas of work that will provide personal job satisfaction.

3. Perform a self-assessment, using knowledge and information, to determine methods to reduce levels of stress.

4. Compile an occupational profile, using reference materials, to determine the characteristics, requirements, and employment outlook of an occupation.

5. Investigate non-wage job characteristics, using available resources, to identify significant job factors.

6. Develop goals, using knowledge, to determine career objective(s).

7. Perform a job search, using information, to identify employment opportunities.

8. Participate in an information interview, using knowledge and resources, to obtain information about a job from an employer.

M. USING EMPLOYABILITY SKILLS (continued)

9. Complete a social security form, using information, to apply for a soci security number.

10. Contact an employer, using a telephone, to pursue potential employment opportunities.

11. Complete a job application, using personal notes, to apply for employment.

12. Prepare a resume, using personal notes, to apply for a job.

13. Write a letter, using personal notes, to apply for a position.

14. Demonstrate appropriate dress, using a knowledge of job requirements, to comply with standards of on-the-job attire and grooming.

15. Interview for a job, using communication skills, to secure employment.

16. Contact a job interviewer, using a telephone, to accept/reject a job.

17. Complete forms, using information, to withhold city, state, and federal taxes.

18. Describe performance evaluation measurements, using knowledge, to identify behavior/attitudes that employers expect employees to exhibit on-the-job.

19. Perform a continuing education program search, using available resource to identify opportunities for retraining, skills upgrading, and career advancement.

20. Analyze career information, using available resources, to identify the opportunities for advancement that exist within an occupation.

21. Describe job resignation/dismissal practice, using knowledge, to identify positive methods for terminating an employment situation.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 1

Task: Select equipment and tools/products, using knowledge of its' function and/or principle of operation, to set up job steps.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment by proper name -	____	____
2. Identified equipment by proper/standard sizes -	____	____
3. Related purpose/function of equipment and/or equipment parts -	____	____
4. Described/demonstrated the sequence/steps of operation for equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction and related equipment operation manual.

Tools and Equipment:

Related Hand and Power Tools
Related Equipment, Products, Accessories

Resources:

Weiss, Home Maintenance, Text.
Weiss, Home Maintenance, Student Guide.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Teacher Activities	Student Learning Activities
Review - Identify common hand power tools found within a household. - Identify common hand and power tools used outside the home. - Identify specialty tools. - Identify tools by name, function and principles of operation. Overview - Explain how different tools relate to different job titles by their purpose. - Explain how the quality of work performed will depend on how well students are able to use tools. - Explain how the level of accuracy achieved by persons in performing tasks is dependent on the proper selection and use of tools. Presentation - Present and demonstrate each hand and power tool. Be explicit on name and function, as well as sizes and application. - Present and review related equipment operating manuals and all accessories. Exercise - Insist that they call tools and equipment by proper name and size. - Design simulation activities that provide practice sessions with each tool. - Label tool storage areas with name and size. Summary - Categorize tools by areas such as measurement and layout, cutting and boring tools, etc. - Demonstrate proper storage and care of tools including recommendations from operating manuals.	Exercise - Review audio visual media on types of tools. - Review media on safety practice related to tool use. - Practice, through simulation. Use of each to perform an activity.

Duty: Operating and Maintaining Equipment	**Duty No.** A **Task No.** 2

Task: Use brooms, using appropriate techniques, to clean a surface.

Achievement Indicators: The learner:

	Yes	No
1. Related type of broom to its purpose and related surface -	____	____
2. Identified related equipment and products -	____	____
3. Demonstrated proper sweeping technique -	____	____
4. Removed collected trash/debris -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's guidelines.

Tools and Equipment:

Push Broom
Corn Broom
Whisk Broom
Dust Pan
Scraper/Putty Knife

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.
Career Related Instruction, Construction, Building Maintenance.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 3

Task: Use dust and wet mops, using appropriate equipment and products, to clean surfaces.

Achievement Indicators: The learner:

	Yes	No
1. Identified type of surface to be cleaned -	____	____
2. Identified equipment and related products by proper name -	____	____
3. Demonstrated proper technique and motion in using mops -	____	____
4. Selected proper products and equipment for job step -	____	____
5. Properly proportioned cleaning products according to product information -	____	____
6. Set up proper safety/hazard equipment for warnings -	____	____
7. Cleaned/stored equipment and products properly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction and related product label information.

Tools and Equipment:

ust Mop with Handle
Wet Mop with Handle
Mop Bucket
Mop Wringer
Cleaning Products

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment	**Duty No.** A **Task No.** 4

Task: Set-up a housekeeping/custodial cart, using knowledge of maintenance schedule/routine, to supply worker(s) for cleaning operations.

Achievement Indicators: The learner:

	Yes	No
1. Reviewed/acknowledged cleaning schedule/routine -	____	____
2. Selected proper products and equipment for upcoming job steps -	____	____
3. Properly proportioned products -	____	____
4. Loaded cart with supplies and materials -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the developed checklist for cart inventory.

Tools and Equipment:

Custodial Cart
Cleaning Equipment
Cleaning Products
Dispenser Refills

Resources:

Sharpton: Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 5

Task: Operate automatic scrubbing machine, using appropriate accessories and products, to clean a floor.

Achievement Indicators: The learner:

	Yes	No
1. Described function and principal of operation of equipment and accessories -	_____	_____
2. Properly proportioned related products -	_____	_____
3. Assembled equipment and accessories -	_____	_____
4. Operated equipment properly/safely -	_____	_____
5. Disassembled/cleaned unit/accessories -	_____	_____
6. Stored equipment and related products -	_____	_____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment operational and procedural manual.

Tools and Equipment:

Automatic Scrubbing Machine
Accessories and Equipment
Related Products

Resources:

Equipment Operating Manual.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 6

Task: Operate wet/dry vacuum, using appropriate accessories, to clean surfaces.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment and accessories by proper name -	____	____
2. Described function of accessories -	____	____
3. Set up equipment for identified type of cleaning -	____	____
4. Operated equipment safely and properly -	____	____
5. Removed debris, cleaned filter/bag -	____	____
6. Stored unit and accessories properly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to operational and procedural manual.

Tools and Equipment:

Wet/Dry Vacuum
Parts and Accessories

Resources:

Equipment Operating Manual.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No.

Task: Operate an upright vacuum, using appropriate procedures and attachments, to clean carpet and upholstery.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment, parts, and accessories by name and function -	____	____
2. Set up equipment for cleaning task -	____	____
3. Adjusted equipment properly for cleaning task -	____	____
4. Operated equipment for cleaning task -	____	____
5. Removed debris, inspected belts for wear and installed bag/filter -	____	____
5. Stored equipment properly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the operational/procedural manual.

Tools and Equipment:
Upright Vacuum Cleaner and Accessories

Resources:
Equipment Operating Manual.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment	**Duty No.** A
	Task No. 8

Task: Operate floor buffing and scrubing machine(s), using appropriate procedures, products, and mixtures, to clean/maintain floors.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment, parts, accessories by name, size, and function -	____	____
2. Identified related products -	____	____
3. Set up equipment for cleaning task -	____	____
4. Performed adjustments and inspecting -	____	____
5. Properly proportioned products - filled reservoirs -	____	____
6. Operated equipment to perform cleaning task -	____	____
7. Removed accessories - drained reservoirs -	____	____
8. Cleand and stored equipment -	____	____
9. Stored products -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related equipment manual.

Tools and Equipment:

Floor Machine
Pads and Brushes
Related Products

Resources:

Equipment Operating Manual.
Related Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No.

Task: Operate hot water extraction equipment, using appropriate products and mixtures, to clean carpet and upholstery.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment, parts and accessories by name, size, and function -	_____	_____
2. Identified related products -	_____	_____
3. Assembled equipment for cleaning task -	_____	_____
4. Performed adjustments/inspections -	_____	_____
5. Properly proportioned products, filled reservoirs -	_____	_____
6. Operated equipment for cleaning tasks -	_____	_____
7. Disassembled/cleaned equipment -	_____	_____
8. Stored equipment and products -	_____	_____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related equipment manual.

Tools and Equipment:

Extraction Equipment
Equipment Accessories
Related Cleaning Products

Resources:

Equipment Operating Manual.
Related Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 10

Task: Use product proportioner, using given mixture ratio, products, and solutions, to mix solvents, waxes, and sealers.

Achievement Indicators: The learner:	Yes	No
1. Located recommended mixture/proportion -	____	____
2. Estimated size, quantity of mixture necessary for cleaning task -	____	____
3. Located/related hazard/warnings related to product -	____	____
4. Performed mixing according to needs -	____	____
5. Cleand and stored mixing equipment -	____	____
6. Stored products and solutions -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to recommended proportions from product information.

Tools and Equipment:

Related Cleaning Products
Equipment Reservoirs
Liquid and Dry Measurememt Equipment

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. [illegible]

Task: Operate a caddy vacuum (back pack vacuum), using appropriate accessories, to clean interior and exterior building surfaces.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment, parts, and accessories by its' name, size, and function -	____	____
2. Adjusted caddy straps -	____	____
3. Selected option (vacuuum/blow) to cleaning task requirement -	____	____
4. Operated equipment for cleaning task -	____	____
5. Disassembled equipment/accessories -	____	____
6. Removed debris, cleaned filter -	____	____
7. Stored equipment and accessories -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment manual.

Tools and Equipment:

Caddy Vacuum
Related Accessories

Resources:

Equipment Operating Manual.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 12

Task: Operate a power washer, using knowledge of setup and safety procedures, accessories and fluid mixtures, to clean surfaces.

Achievement Indicators: The learner:	Yes	No
1. Identified equipment, parts, accessories by name, size and function -		
2. Set up equipment - connected accessories and hoses -		
3. Set up piece to be washed for cleaning -		
4. Set up work area for cleaning task -		
5. Adjusted for proper pressure -		
6. Operated equipment efficiently -		
7. Disassembled equipment, cleaned parts and accessories -		
8. Stored equipment properly -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment manual.

Tools and Equipment:

Power Washer
Related Equipment and
Accessories
Cleaning Agents

Resources:

Equipment Operating Manual.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No.

Task: Operate a commercial washer and dryer, using knowledge of appropriate cycles, detergent and additive solutions, and temperature settings, to clean clothing, linens, or other washable fabrics.

Achievement Indicators: The learner:	Yes	No
1. Identified equipment, by name and function -	____	____
2. Identified/located fabric are labels -	____	____
3. Sorted clothing by cleaning requirements -	____	____
4. Selected products necessary for cleaning -	____	____
5. Related product information and necessary proportions -	____	____
6. Performed proper settings for machine cycles -	____	____
7. Performed proper temperature settings -	____	____
8. Operated equipment to launder fabric -	____	____
9. Removed clothing/linen for proper storage -	____	____
10. Cleaned filters and interior/exterior finish according to schedule recommendations -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment manuals, fabric requirements, and supervisor's satisfaction.

Tools and Equipment:

Commercial Washing Machine
Commercial Dryer
Laundry Detergent
Laundry Products

Resources:

Equipment Operating Manual.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.
Fabric Care Instructions.

Duty: Operating and Maintaining Equipment	**Duty No.** A **Task No.** 14

Task: Operate a flat iron, using appropriate temperature settings and operation procedures, to remove wrinkles from fabrics.

Achievement Indicators: The learner:	Yes	No
1. Identified equipment by name and functions -	____	____
2. Identified related products and product information -	____	____
3. Related knowledge of fabric care -	____	____
4. Performed start up procedure -	____	____
5. Adjusted equipment for appropriate temperature settings according to fabric requirements -	____	____
6. Operated equipment to press fabric according to fabric requirements -	____	____
7. Shut down equipment -	____	____
8. Stored equipment and related products -	____	____
9. Stored clothing/linen as required -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to recommended fabric requirements.

Tools and Equipment:	**Resources:**
Flat Iron Laundered Fabric	Fabric Care Instructions/Requirements. Equipment Operating Manual. Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. [illegible]

Task: Operate a steam/dry iron, using knowledge of fabrics, temperature requirements and operation procedures, to remove wrinkles.

Achievement Indicators: The learner:	Yes	No
1. Identified equipment by name and function -	____	____
2. Related knowledge of fabric care -	____	____
3. Selected proper related products -	____	____
4. Applied products according to product information -	____	____
5. Operated equipment according to procedure -	____	____
6. Stored equipment properly -	____	____
7. Stored clothing and/or linen as required -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment manual, related product information and the supervisor's satisfaction.

Tools and Equipment:

Steam/Dry Iron
Related Ironing Products
Laundered Fabric
Ironing Board with Pad

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 16

Task: Operate a patching machine, using knowledge of operational and safety procedure, to patch clothing and linens.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment and parts by name and function -	____	____
2. Identified fabric repair needs -	____	____
3. Set up equipment and work area -	____	____
4. Inserted damaged fabric area -	____	____
5. Operated equipment properly and efficiently to repair fabric -	____	____
6. Stored equipment and related materials -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related equipment manual.

Tools and Equipment:

Patching Machine
Damaged Fabric

Resources:

Equipment Operating Manual.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 1

Task: Operate hand tools, using knowledge of their function, principle of operation, and safety procedures, to layout, cut, fasten, shape, or finish materials.

Achievement Indicators: The learner:

	Yes	No
1. Identified tool by name -	_____	_____
2. Described function of tool -	_____	_____
3. Demonstrated principals of operation of tool -	_____	_____
4. Maintained tool cutting edge, moving parts, contact edge -	_____	_____
5. Operated tool to complete job step -	_____	_____
6. Stored tool properly -	_____	_____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Related Hand Tools

Resources:

Weiss, Home Maintenance, Text.
Weiss, Home Maintenance, Student Guide.
Prentice-Hall Media, Safety with Hand Tools.
United Learning, Woodworking Hand Tools.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. 18

Task: Operate power tools, using knowledge of their function, principles of operation, and safety equipment, to cut, shape, fasten, or finish materials.

Achievement Indicators: The learner:

	Yes	No
1. Identified tool by name -	____	____
2. Related function of tool -	____	____
3. Installed blades, buts, etc. -	____	____
4. Adjusted guide, fences, cutting bases to proper depth -	____	____
5. Set safety equipment -	____	____
6. Operated tool to perform task -	____	____
7. Stored tool and related equipment properly -	____	____
8. Maintained cutting edges -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment manual.

Tools and Equipment:

Selected Portable Power Tools

Resources:

Equipment Operating Manual.
Weiss, Home Maintenance, Text.
Weiss, Home Maintenance, Student Guide.
Singer Career Systems, Skills Orientation Series.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No.

Task: Use fasteners/hardware/adhesives, using knowledge of tools, procedures, and safety requirements, to join materials.

Achievement Indicators: The learner:	Yes	No
1. Identified by name -		
2. Related function of fastener -		
3. Identified standard sizes of fasteners -		
4. Selected proper installation tools -		
5. Demonstrated procedures for installation -		
6. Demonstrated techniques for storage and supply maintenance -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to established sizing standards.

Tools and Equipment:

Related Hand Tools
Fasteners
Adhesives
Hardware

Resources:

Weiss, Home Maintenance, Text.
Weiss, Home Maintenance, Student Guide.
Time Life Books, Home Repair and Improvement Series.
Instructional Materials Laboratory, University of Missouri - Columbia, Vocational Preparation Curriculum: Carpentry.

Duty: Operating and Maintaining Equipment	**Duty No.** A **Task No.** 20

Task: Operate a power auger, using accessories, to unclog waste pipe.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment by name -	____	____
2. Identified accessories by name, size, and function -	____	____
3. Determined location of clog - estimated equipment needs -	____	____
4. Set up equipment - made connections -	____	____
5. Inserted auger into cleanout -	____	____
6. Followed procedures to operate equipment -	____	____
7. Cleaned/stored accessories and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment manual recommendations.

Tools and Equipment:

Power Auger and Accessories
Screwdriver

Resources:

Singer Career Systems, Using a Drain Auger.
Time Life Books, Home Improvement and Repair Series: Plumbing.

Duty: Operating and Maintaining Equipment

Duty No. A

Task No. [illegible]

Task: Store tools and material, using knowledge of inventory policies, safety standards, and laboratory organization, to maintain an efficient/safe operation.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment/materials by name and function -	____	____
2. Identified equipment by type and size -	____	____
3. Identified related products and product information -	____	____
4. Identified organizational policies of facility -	____	____
5. Related inventory and supply maintenance policies -	____	____
6. Inspected materials/equiapment for damage and wear -	____	____
7. Implemented security procedures as required -	____	____
8. Completed forms and records as required -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the policies established by the supervisor.

Tools and Equipment:

Storage Units
Tool Crib

Resources:

Weiss, Home Maintenance, Text.

Duty: Caring for Resiliant and NonResiliant Floors

Duty No. B

Task No. 1

Task: Identify floors, using knowledge of floor types, to setup for cleaning and care.

Achievement Indicators: The learner:

	Yes	No
1. Listed types of resiliant floors -	____	____
2. Listed types of nonresiliant floors -	____	____
3. Identified equipment and products necessary to perform related cleaning tasks -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Floor Type Samples

Resources:

Career Related Instruction, Construction Building Maintenance.

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Teacher Activities

Review

- Ask how many different floor types are found in a household and/or school.
- Ask what types of equipment and products are used to maintain floors identified.

Overview

- Explain that the amount of floor surface needing maintenance may require special cleaning equipment.
- Explain that proper identification of floors is esesntial to the selection of equipment, equipment accessories, and products.

Presentation

- Show different examples of floor types. Include types of facilities that have certain types of floors and reasons why.

Exercise

- Have students practice what they have learned through touring available facilities.
- Have students relate equipment to type of floor surface it is used to clean.

Summary

- Review information and apply to situations within different facilities. Include building traffic and times frames necessary to perform proper cleaning and maintenance.

Student Learning Activities

Exercise

- Review related audio-visual media.
- Relate information gained through visiting different facilities.
- Set up and collect equipment and products necessary to perform cleaning operations of different floor types.

Duty: Caring for Resiliant and Nonresiliant Floors

Duty No. B

Task No. 2

Task: Wet scrub floors, using appropriate machine, accessories, [illegible] solutions, to remove dirt and marks.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment by name and function -		
2. Identified accessories and necessary products -		
3. Related product information -		
4. Estimated area to be cleaned -		
5. Set up/assembled equipment -		
6. Properly proportioned products -		
7. Set up safety hazard warnings -		
8. Operated equipment to perform cleaning task -		
9. Disassembled equipment -		
10. Cleaned, drained reservoirs, stored equipment -		
11. Recorded task on maintenance - schedule/record -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product label information, equipment manual, and the supervisor's satisfaction.

Tools and Equipment:

Floor Machine and Accessories
Cleaning Solutions
Product Proportioner

Resources:

Equipment Operating Manual.
Cleaning Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Caring for Resiliant and Nonresiliant Floors

Duty No. B

Task No. [illegible]

Task: Strip a floor, using knowledge of procedures, and products, to finish a floor surface.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment by name and function -		
2. Identified products and product information -		
3. Estimated needs of area to strip -		
4. Proportioned products -		
5. Set up and operated equipment to perform task -		
6. Cleaned all equipment and accessories -		
7. Stored equipment and supplies -		
8. Recorded task on maintenance schedule/record -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to product requirements.

Tools and Equipment:

Floor Machine and Accessories
Wet Mop
Mop Bucket and Wringer
Commercial Stripping Product
Product Proportioner

Resources:

Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Caring for Resiliant and Nonresiliant Floors

Duty No. B

Task No. 4

Task: Seal a floor, using knowledge of equipment procedures and products, to finish a floor surface.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment by name and function -		
2. Identified products and product information -		
3. Estimated needs of area to be sealed -		
4. Proportioned products according to label information -		
5. Set up and operated equipment necessary to perform task -		
6. Cleaned all equipment and accessories -		
7. Stored equipment and supplies -		
8. Recorded task on maintenance schedule/record -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to recommendation in the equipment manuals, product information and the supervisor's satisfaction.

Tools and Equipment:

Product Applicator
Commercial Sealing Product

Resources:

Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Caring for Resiliant and Nonresiliant Floors

Duty No. B

Task No.

Task: Wax a floor, using knowledge of equiment, procedures, and commercial products, to coat a floor surface.

Achievement Indicators: The learner:

The learner:	Yes	No
1. Identified equipment by name and function -		
2. Identified products and product information -		
3. Estimated needs of area to be waxed -		
4. Proportioned products according to product information, properly -		
5. Set up safety and hazard warnings -		
6. Set up and operated equipment to perform task -		
7. Cleaned equipment and accessories -		
8. Stored equipment and supplies -		
9. Recorded task on maintenance schedule -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to equipment manual information, product requirements, and to the supervisor's satisfaction.

Tools and Equipment:

Floor Machine and Accessories
Applicator
Commercial Waxing Product
Product Proportioner

Resources:

Sharpton, Coordinated Vocational Education and Training, Cleaning Services.

Duty: Caring for Resiliant and Nonresiliant Floors

Duty No. B

Task No. 6

Task: Finish a floor, using knowledge of procedures and equipment operation, to shine floor surface.

Achievement Indicators: The learner:

	Yes	No
1. Identified necessary equipment by name and function -	____	____
2. Identified necessary products and product information -	____	____
3. Estimated needs of area to be finished -	____	____
4. Collected necessary equipment -	____	____
5. Operated equipment according to procedure -	____	____
6. Cleaned and stored equipment -	____	____
7. Recorded task on proper record -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's specifications.

Tools and Equipment:

Floor Machine and Accessories
Commercial Finishing Products
Product Proportioner

Resources:

Product Information Label.
Equipment Operating Manuals.
Sharpton, *Coordinated Vocational Education and Training: Cleaning Services*.

Duty: Caring for Resiliant and Nonresiliant Floors

Duty No. B

Task No. [illegible]

Task: Spray-buff a floor, using a buffing machine, accessories, and spray buff products, to shine a floor surface.

Achievement Indicators: The learner:	Yes	No
1. Identified equipment by name and function -	____	____
2. Identified products and product information -	____	____
3. Estimated needs of area to be buffed -	____	____
4. Collected necessary equipment -	____	____
5. Set up equipment to perform task -	____	____
6. Operated equipment to perform task -	____	____
7. Cleaned and stored equipment and supplies -	____	____
8. Recorded task on proper record -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's specifications.

Tools and Equipment:

Floor Machine and Accessories
Soary Buff Products
Spray Applicator

Resources:

Commercial Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty:	Caring for Resiliant and Nonresiliant Floors	**Duty No.**	B
		Task No.	8

Task: Maintain floor finishes, using wet and dry mopping, to clean surface.

Achievement indicators: The learner:

	Yes	No
1. Identified equipment by name and function -	____	____
2. Identified traffic patterns of area to be maintained -	____	____
3. Estimated needs of area to be maintained -	____	____
4. Operated equipment according to demonstrated techniques-	____	____
5. Disposed of debris and/or waste water -	____	____
6. Disassembled equipment used for cleaning -	____	____
7. Stored equipment properly -	____	____
8. Deposited mop heads for laundering -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's specifications.

Tools and Equipment:

Wet Mop/Dry Mop
Mop Bucket and Wringer
Floor Cleaning Product
Product Proportioner

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Caring for Carpeted Floors

Duty No. C

Task No. 1

Task: Remove carpet stains, using appropriate products, product mixtures, and application techniques, to clean stained area.

Achievement Indicators: The learner:

	Yes	No
1. Determined cleaning needs of surface -		
2. Located appropriate products and equipment -		
3. Identified product information -		
4. Proportioned products as required -		
5. Applied product according to product information -		
6. Rinsed/vacuumed stained area -		
7. Stored equipment and products correctly -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to product information.

Tools and Equipment:
Commercial Cleaning Product Applicator
Carpet Scrubber
Extraction Equipment

Resources:
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Teacher Activities	Student Learning Activities
Review - Present and/or demonstrate equipment and/or products used in cleaning carpeted areas. - Present procedural steps in cleaning carpted areas. Overview - Relate to students different material types of carpets and cleaning requirements of each. Presentation - Present products related to cleaning task and product information. - Demonstrate product proportioning necessary for products. - Demonstrate application procedures using equipment. - Relate warning and hazard information associated to products. Exercise - Have students estimate needs, proportions and application procedures for cleaning products necessary to perform cleaning task. Summary - Review information presented and outline how different products and equipment may require changes in proportions for other areas.	Exercise - Complete product label information sheets. - Practice estimating area to be cleaned and amount of product required. - Practice appling products in simulation activities or as part of a cleaning procedure. - Review related media associated to cleaning task.

Duty: Caring for Carpeted Floors

Duty No. C

Task No. 2

Task: Spot clean carpets, using knowledge of products, product mixtures, and application techniques, to clean carpeted area.

Achievement Indicators: The learner:

	Yes	No
1. Determined cleaning needs of surface -	____	____
2. Located appropriate products and equipment -	____	____
3. Identified necessary product information -	____	____
4. Proportioned products properly -	____	____
5. Applied products according to procedure -	____	____
6. Operated hand and power equipment -	____	____
7. Rinsed/vacuumed stained areas as required -	____	____
8. Stored equipment and products correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to product information.

Tools and Equipment:

Carpet Cleaning Product
Product Proportioner
Applicator

Resources:

Sharpton, Coordinated Vocational Education and Training, Cleaning Services.

Duty: Caring for Carpeted Floors

Duty No. C

Task No. 3

Task: Vacuum carpet, using a vacuum cleaner, appropriate settings, and accessories, to remove dirt.

Achievement Indicators: The learner:

	Yes	No
1. Determined cleaning needs of area -	____	____
2. Located necessary equipment and supplies -	____	____
3. Set up equipment for cleaning -	____	____
4. Adjusted equipment for cleaning -	____	____
5. Operated equipment to perform cleaning tasks -	____	____
6. Inspected belts, filters, bag -	____	____
7. Removed debris and replaced bag as required -	____	____
8. Stored equipment and accessories correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related equipment operation manual.

Tools and Equipment:

Vacuum Cleaner
Replacement Bags/Filters
Replacement Belts
Attachments/Accessories

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Caring for Carpeted Floors

Duty No. C

Task No. 4

Task: Shampoo carpet, using knowledge of product, product proportions, and procedures, to clean carpeted areas.

Achievement Indicators: The learner:

	Yes	No
1. Determined cleaning needs of carpet -	____	____
2. Identified equipment necessary for cleaning tasks -	____	____
3. Located products and product information for cleaning task -	____	____
4. Proportioned products properly -	____	____
5. Removed furniture as required -	____	____
6. Filled reservoirs -	____	____
7. Assembled and adjusted equipment -	____	____
8. Applied proportioned product using equipment -	____	____
9. Rinsed/vacuuumed cleaned area -	____	____
10. Disassembled/cleaned equipment -	____	____
11. Stored all equipment and accessoires -	____	____
12. Replaced furniture -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information, equipment operation manual, and to the supervisor's satisfaction.

Tools and Equipment:

Carpet Scrubber
Carpet Cleaning Product
Vacuum Cleaner
Product Proportioner

Resources:

Equipment Operating Manual.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Caring for Carpeted Floors

Duty No. C

Task No. 5

Task: Clean capret by extraction, using knowledge of equipment setup and operation product and product proportions, and procedures, to remove dirt and stains.

Achievement Indicators: The learner:

		Yes	No
1.	Located proper equipment and accessories -	____	____
2.	Identified products and product information -	____	____
3.	Removed furniture -	____	____
4.	Proportioned products properly -	____	____
5.	Filled reservoirs -	____	____
6.	Set up and adjusted equipment and accessoires -	____	____
7.	Applied cleaning solution using equipment -	____	____
8.	Rinsed/vacuumed cleaned area -	____	____
9.	Disassembled and cleaned equipment and accessories -	____	____
10.	Stored equipment and products appropriately -	____	____
11.	Recorded information on maintenance record/ schedule -	____	____
12.	Replaced furniture -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related product information, equipment operation manual, and to the supervisor's satisfaction.

Tools and Equipment:

Extraction Equipment and Accessories
Product Proportioner
Carpet Cleaning Products
  Cleaner
  Spotter
  Defoamer

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Caring for Carpeted Floors

Duty No. C

Task No. 6

Task: Clean carpet with roto floor machine, using knowledge of setup and operations, related products and proportions, and procedures, to remove dirt and stains.

Achievement Indicators: The learner:

	Yes	No
1. Located proper equipment and supplies -	____	____
2. Identified necessary products and product information -	____	____
3. Removed furniture from area to be cleaned -	____	____
4. Proportioned products properly -	____	____
5. Set up and adjusted equipment -	____	____
6. Applied cleaning solutions using equipment -	____	____
7. Disassembled and cleaned equipment and accessories -	____	____
8. Vacuumed cleaned area-	____	____
9. Stored equipment and supplies appropriately -	____	____
10. Recorded information on cleaning/maintenance record -	____	____
11. Replaced furniture -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related product information, equipment operation manual, and to the supervisor's satisfaction.

Tools and Equipment:

Roto Floor Machine
Cleaning Product
Product Proportioner
Vacuum Cleaner

Resources:

Equipment Operating Manual.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No. 1

Task: Follow cleaning schedule, using knowledge of job steps and building traffic, to meet daily, weekly, and monthly needs.

Achievement Indicators: The learner:

	Yes	No
1. Located necessary cleaning/maintenance schedule -	____	____
2. Interpreted information from cleaning/maintenance schedule -	____	____
3. Determined necessary equipment, supplies, and products -	____	____
4. Set up car/carriers with cleaning needs -	____	____
5. Determined sequence of cleaning steps -	____	____
6. Recorded information on cleaning/maintenance record as required -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to supervisor's satisfaction.

Tools and Equipment:
Samples of Cleaning Schedule

Resources:
Career Related Instruction: Construction, Building Maintenance.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Teacher Activities	Student Learning Activities
Review - Review how different types of schedules and scheduling procedures are used in everyday life. - Relate how performance of a task or job may be evaluated through checksheets or substeps.	Exercise - Develop and schedule regular activities. - Develop cleaning and maintenance schedules. Review and have students perform tasks required. Evaluate work.
Overview - Demonstrate how equipment comes with suggested maintenance schedules given through related manuals. - Explain waht is to be taught and why this activity is important.	
Presentation - Present a variety of cleaning and maintenance schedules. - Demonstrate how cleaning and maintenance schedules are developed.	
Exercise - Have students follow a cleaning and maintenance schedule on a daily, weekly, and monthly basis.	
Summary - Summarize what has been learned by demonstrating how it fits into the total job description and how it determines what tasks need to be performed.	

Duty: Maintaining Surfaces

Duty No. D

Task No. 2

Task: Clean glass surfaces, using cleaning mixtures, to remove dirt.

Achievement Indicators:

The learner:	Yes	No
1. Located necessary supplies and products -	____	____
2. Applied cleaning product appropriately -	____	____
3. Removed cleaning product appropriately to clean glass surface -	____	____
4. Shined glass surface -	____	____
5. Stored materials and products as required -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the procedures set forth by the supervisor.

Tools and Equipment:

Glass Cleaner
Spray Applicator
Cleaning Cloth
Razor Blade Scraper

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.
Career Related Instruction: Construction, Building Maintenance.

Duty: Maintaining Surfaces

Duty No. D

Task No. 3

Task: Wash windows, using knowledge of equipment operations, products, and proportions, and procedures, to remove dirt.

Achievement Indicators: The learner:

	Yes	No
1. Located necessary equipment, supplies and products -	____	____
2. Proportioned products according to product information -	____	____
3. Set up equipment (ladders/scaffold) appropriately -	____	____
4. Applied cleaning solutions correctly -	____	____
5. Removed cleaning solutions correctly -	____	____
6. Shined glass surface -	____	____
7. Disassembled and stored equipment -	____	____
8. Stored supplies and products -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the procedures and instructions set forth by the supervisor.

Tools and Equipment:
Glass Cleaning Product
Cleaning Cloth
Applicator
Bucket
Squeegee

Resources:
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.
Career Related Instruction: Construction, Building Maintenance.

Duty: Maintaining Surfaces

Duty No. D

Task No. 4

Task: Clean leather surfaces, using cleaning mixtures, conditioners, and knowledge of product application, to cleanse surface.

Achievement Indicators: The learner:

	Yes	No
1. Located proper supplies and products -	____	____
2. Related product information -	____	____
3. Applied product according to product information -	____	____
4. Wiped surfaces clean and dry -	____	____
5. Stored supplies and products -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Cleaning Product
Applicator/Cloth

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces	**Duty No.** D **Task No.**

Task: Clean wood, using knowledge of products, production application, and equipment procedures, to cleanse surface.

Achievement Indicators: The learner:

	Yes	No
1. Located necessary supplies, products, and product information related to the cleaning task -	____	____
2. Proportioned cleaning products as required by product information -	____	____
3. Applied cleaning solution according to product information -	____	____
4. Wiped wood surface clean -	____	____
5. Stored supplies and products correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information.

Tools and Equipment:

Cleaking Product
Product Applicator
Clean Cloth

Resources:

Cleaning Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No. 6

Task: Clean porcelin, using cleaning products, germicides, and knowledge of application procedures, to disinfect surface.

Achievement Indicators: The learner:	Yes	No
1. Identified necessary supplies and products to perform cleaning -	____	____
2. Related product label information -	____	____
3. Proportioned products as necessary -	____	____
4. Applied products according to product information -	____	____
5. Wiped surfaces clean of solution and dirt -	____	____
6. Stored all supplies and products correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information.

Tools and Equipment:

Cleaning Products
Product Applicator/Sponge
Bowl Brush

Resources:

Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No.

Task: Dust walls, ceilings, and fixtures, using appropriate equipment and procedures, to clean surfaces.

Achievement Indicators: The learner:	Yes	No
1. Located/identified necessary equipment and supplies -	____	____
2. Assembled necessary equipment -	____	____
3. Applied related products according to product information -	____	____
4. Wiped all surface areas free of dust -	____	____
5. Stored all equipment and supplies -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Dustmop with Handle
Long Handled Duster
Dustclothes
Dusting Cloth Treatment Spray

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No. 8

Task: Wash walls and ceilings, using appropriate equipment, products, and product preparation and proportions, to clean surfaces.

Achievement Indicators: The learner:

	Yes	No
1. Determined equipment and supply needs for cleaning -	____	____
2. Removed/covered furniture -	____	____
3. Set up equipment needed for cleaning -	____	____
4. Related cleaning product information and proportioned product -	____	____
5. Applied cleaning solution according to surface needs -	____	____
6. Wiped surface to remove dirt and rinse cleaning solution -	____	____
7. Replaced/uncovered furniture and equipment -	____	____
8. Disassembled and stored equipment -	____	____
9. Stored supplies and products correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the procedure and policies set forth by the supervisor.

Tools and Equipment:

Cleaing Products
Step Ladder
Wall Washing Bucket

Resources:

Sharpton, *Coordinated Vocational Education and Training: Cleaning Services*.

Duty: Maintaining Surfaces

Duty No. D

Task No.

Task: Clean appliances, using appropriate supplies, products, or procedures, to maintain interior/exterior surfaces.

Achievement Indicators: The learner:

	Yes	No
1. Determined appropriate cleaning procedure -	____	____
2. Set procedure for self cleaning stove -	____	____
3. Set timer, locks, and temperature to initiate cycle -	____	____
4. Related product information for cleaning stove -	____	____
5. Applied product according to instruction and safety procedure -	____	____
6. Scrubed interior surface -	____	____
7. Removed cleaning product and dirt from surface -	____	____
8. Stored supplies and product correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related equipment operation manual and/or related product information.

Tools and Equipment:

Cleaning Product
Sponge
Rubber Gloves
Bucket

Resources:

Equipment Operating Manual.
Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces	**Duty No.** D **Task No.** 10

Task: Clean and replenish dispensers, using knowledge of procedures to dissmantle and assemble dispeners and product information to maintain supply.

Achievement Indicators: The learner:

	Yes	No
1. Removed security device to open dispenser -	_____	_____
2. Unlocked/opened dispenser -	_____	_____
3. Removed soiled product or carrier -	_____	_____
4. Determined replacement article, supply or amount -	_____	_____
5. Installed fresh supply according to product information or system flow -	_____	_____
6. Recorded information on inventory record form and or service checklist -	_____	_____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment instructions, product information, and/or the supervisor's satisfaction.

Tools and Equipment:

Dispenser Key
Dispenser Supplies

Resources:

Equipment Loading Label or Instructions.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces	**Duty No.** D
	Task No.

Task: Remove graffiti, using knowledge of products and procedures, to clean/cover marking.

Achievement Indicators: The learner:	Yes	No
1. Identified products and product information -	____	____
2. Applied product according to product information to remove graffiti -	____	____
3. Scrubed/wiped surface -	____	____
4. Applied appropriate products to cover graffiti -	____	____
5. Performed procedures to replace wall/stall surface -	____	____
6. Stored supplies and products correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to specific criteria set forth by the supervisor.

Tools and Equipment:

Commercial Product
Sponge
Scrubbing Pad
Rubbert Gloves
Paint/Brush
Basic Hand Tools

Resources:

Product Information Label.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces	**Duty No.** D **Task No.** 12

Task: Disinfect surfaces, using germicide products and cleaning procedures, to maintain health and safety standards.

Achievement Indicators: The learner:

	Yes	No
1. Identified proper product and product information -	____	____
2. Proportioned product according to information, properly -	____	____
3. Applied to surfaces, covering entire surface -	____	____
4. Stored supplies and products correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to standards set forth by the supervisor.

Tools and Equipment:	**Resources:**
Disinfecting Product Sponge Sponge Mop Bucket/Wringer Wet Mop Cleaning Cloth	Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No. 15

Task: Maintain germ free environment, using knowledge of products and product application, and isolation/sterilization procedure, to protect personal health.

Achievement Indicators: The learner:

	Yes	No
1. Identified proper supplies and product necessary for cleaning -	____	____
2. Proportioned products as necessary -	____	____
3. Related proper procedures for entering and exiting germ free environment -	____	____
4. Dressed in appropriate clothing (mask, cap, gown, pants, boots) -	____	____
5. Enter isolation area according to procedure -	____	____
6. Cleaned surfaces -	____	____
7. Removed debris -	____	____
8. Exited isolation area according to procedure -	____	____
9. Recorded information on cleaning/maintenance record -	____	____
10. Stored supplies and products correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to standards set forth by the public health department.

Tools and Equipment:

Germicide Products
Mask, Hat, Covers, Booties
Buckets
Sponge
Mops
Cloths

Resources:

Hospital Isolation/Sterilization Procedure and Code.
Public Health Code.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces	**Duty No.** D
	Task No. 14

Task: Collect and empty trash, using appropriate equipment to transport and store debris, to maintain clean environment.

Achievement Indicators: The learner:

	Yes	No
1. Respected privacy of building/office occupants -		
2. Secured/tied liner -		
3. Replaced liner and/or lid -		
4. Transported to outside storage dumpster -		
5. Cleaned/washed waste container -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to guidelines set forth by supervisor.

Tools and Equipment:	**Resources:**
Plastic Bags Scrub Brush Waste Transport Dumpster	Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No.

Task: Demonstrate bedmaking, using appropriate linens, blankets, and folding techniques, to change a bed.

Achievement Indicators: The learner:

	Yes	No
1. Located fresh linen - appropriate size -		
2. Removed soiled linens from bed -		
3. Spread clean linen -		
4. Centered linens on bed -		
5. Folded corners correctly -		
6. Tucked rubber or plastic drawsheet under mattress -		
7. Applied covers or blanket -		
8. Cuffed blanket or covers -		
9. Encased pillows -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to procedures and requirements demonstrated by the supervisor.

Tools and Equipment:

Clean Linen

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No. 16

Task: Clean upholstered surfaces, using knowledge of shampooing and extraction methods, to remove dirt and stains.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment and accessories necessary for cleaning -		
2. Identified products and product information -		
3. Proportioned products properly -		
4. Filled reservoirs -		
5. Set up all equipment -		
6. Spot cleaned all stained areas -		
7. Applied cleaning mixture to furniture -		
8. Rinsed/extracted cleaning solution -		
9. Cleaned shampooing/extraction equipment -		
10. Stored equipment and cleaning products -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information, equipment operations manual, and guidelines set forth by the supervisor.

Tools and Equipment:

Cleaning Products
Product Proportioner
Bucket
Brush
Extraction Equipment and Accessories

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty:	Maintaining Surfaces	**Duty No.**	D
		Task No.	

Task: Clean stairs, using brooms, mop, cleaning products, and floor finisher, to maintain surface.

Achievement Indicators: The learner:	Yes	No
1. Identified tools and supplies necessary to performed task -	____	____
2. Swept staircase -	____	____
3. Scraped debris as necessary -	____	____
4. Displayed warning/hazard signs -	____	____
5. Proportioned cleaning products according to production information -	____	____
6. We moped surfaces as necessary -	____	____
7. Sealed/waxed surfaces as necessary -	____	____
8. Vacuumed carpeted surfaces -	____	____
9. Cleaned stairwell/molding and wall surfaces -	____	____
10. Stored equipment and cleaning products -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to specific policies and procedures set forth by the supervisor.

Tools and Equipment:

Cleaning Products
Corn Broom
Baseboard Brushes
Clean Cloths
Wet Mop
Bucket/Wringer

Resources:

Career Related Instruction: Construction, Building Maintenance.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces	**Duty No.** D
	Task No. 18

Task: Clean water fountains, using cleaning and disinfecting products, to maintain appearance.

Achievement Indicators: The learner:

	Yes	No
1. Identified cleaning equipment and products -	____	____
2. Proportioned cleaning product according to product information -	____	____
3. Cleaned drain filter -	____	____
4. Removed rust/tarnish stained using appropriate product -	____	____
5. Applied cleaning solution -	____	____
6. Wiped clean removing dirt -	____	____
7. Shined finish -	____	____
8. Dusted refrigerator coils as necessary -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to policies and procedures set forth by the supervisor.

Tools and Equipment:

Cleaning Product
Spong
Wet/Dry Vacuum with
Accessories

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No.

Task: Clean sand and dry urns, using replacement products and disposal techniques, to remove debris.

Achievement Indicators: The learner:

	Yes	No
1. Identified/collected equipment and supplies -	____	____
2. Checked urn for embers -	____	____
3. Sifted debris from sand -	____	____
4. Replaced sand if deemed necessary -	____	____
5. Disposed of debris in non flammable container -	____	____
6. Wiped interior and exterior surface of urn -	____	____
7. Disposed of debris -	____	____
8. Stored supplies and products -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Sifter
Replacement Sand
Cleaning Cloth

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Surfaces

Duty No. D

Task No. 20

Task: Report repair needs/hazards, using proper communication system and/or forms, to maintain building safety.

Achievement Indicators: The learner:

	Yes	No
1. Related system used to report repair needs -	____	____
2. Informed supervisor of identified repair need -	____	____
3. Completed maintenance request form -	____	____
4. Forwarded form to proper person -	____	____
5. Shut down and labeled equipment needing repair -	____	____
6. Shut off electricity or water supply to defective equipment -	____	____
7. Contacted service represntative for repair -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Sample Reporting Forms

Resources:

Duty: Maintaining Surfaces

Duty No. D

Task No. 21

Task: Clean light fixtures, using knowledge of disassembly/assembly procedure and basic safety procedures, to remove dirt and dust.

Achievement Indicators:

The learner:	Yes	No
1. Identified tools and equipment needed for task -	____	____
2. Identified necessary cleaning products -	____	____
3. Disassembled fixture -	____	____
4. Cleaned fixture surfaces -	____	____
5. Replaced bulb as required -	____	____
6. Assembled fixture -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according the the requirements of the supervisor.

Tools and Equipment:

Basic Hand Tools
Ladder (step)
Cleaning Products/Supplies
Replacement Bulbs

Resources:

Sharpton, Coordinating Vocational Education and Training: Cleaning Services
Repairing a Fluoresent Light

Duty:	Performing Laundry Operations	**Duty No.**	E
		Task No.	1

Task: Pretreat and remove stains, using knowledge of fabric requirements and products, to prepare for laundering.

Achievement Indicators: The learner:	Yes	No
1. Related information concerning garment care or special washing instructions/warnings -	____	____
2. Selected proper method for removal of stain -	____	____
3. Selected proper pretreating products for garments -	____	____
4. Removed nonwashable trims and buttons -	____	____
5. Proportioned or applied product as directed by product information -	____	____
6. Sorted garments to prepare for laundering -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Pretreating Products	Fabric Care Instruction Label. Product Information Label. Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Teacher Activities

Review

- Review what students have learned previous to beginning this new task. Review achievement indicators.

Overview

- Tell what is to be taught and why it is important.

Presentation

- Present products and related product information.
- Demonstrate product proportioning and application.
- Demonstrate sequence of step for laundering fabric based on fabric requirements.

Exercise

- Have students practice what they have learned. See student activities.

Summary

- Review what has been taught to reinforce learning. Have students complete post-test on product information and fabric requirements.

Student Learning Activities

Exercise

- Review related audio-visual media.
- Complete product label forms. Have students locate information from product labels.
- Have students locate and document fabric care information from different types of fabric.
- Provide soiled fabric and equipment for laundering. Have students launder fabric.

Duty: Performing Laundry Operations

Duty No. E

Task No. 2

Task: Sort laundry, using knowledge of fabric and laundering procedures, to prepare for cleaning.

Achievement Indicators: The learner:

	Yes	No
1. Identified garment information -		
2. Sorted garments by special washing instructions -		
3. Sorted sturdy whites and colorfast items -		
4. Sorted non colorfast items -		
5. Sorted heavily soiled items -		
6. Sorted delicate items -		
7. Sorted items that heavily shed lint -		
8. Sorted garments needing mending -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction and recommended fabric requirements.

Tools and Equipment:

Soiled Laundry

Resources:

Fabric Care Information Label.

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Performing Laundry Operations	**Duty No.** E
	Task No. [illegible]

Task: Make minor repairs, using sewing or patching machines as other commercial mending products, to mend fabric.

Achievement Indicators: The learner:	Yes	No
1. Identified items needing repair -	____	____
2. Identified method and related equipment necessary for selected mending process -	____	____
3. Set up mending equipment -	____	____
4. Threaded needles -	____	____
5. Set adjustments (speed, temperature) -	____	____
6. Set up fabric for repair -	____	____
7. Operated equipment/applied product -	____	____
8. Inspected fabric and work completed -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to indicated product information.

Tools and Equipment:	**Resources:**
Sewing Needle Thread Sewing Machine Patching Machine Fabric Patches	Equipment Operating Manuals. Product Information Labels.

Duty: Performing Laundry Operations

Duty No. E

Task No. 4

Task: Wash fabric, using knowledge of fabric requirements, equipment operating procedures, and product information, to clean fabric.

Achievement Indicators:

The learner:	Yes	No
1. Identified garment cleaning requirements -	____	____
2. Selected cleaning products -	____	____
3. Sorted laundry -	____	____
4. Proportioned product according to product information -	____	____
5. Pretreated heavily soiled/stained garments -	____	____
6. Selected water temperature and level settings -	____	____
7. Started machine cycle -	____	____
8. Filled washing tub to proper level -	____	____
9. Added cleaning conditioning product -	____	____
10. Closed/sealed machine doors -	____	____
11. Allowed machine to cycle -	____	____
12. Removed clothing for drying process -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information, equipment operating manual and/or the supervisor's satisfaction.

Tools and Equipment:

Commercial Washing Machine
Laundry Products

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.
Equipment Operating Manual.

Duty: Performing Laundry Operations

Duty No. E

Task No. 5

Task: Dry laundry, using knowledge of fabric requirements, equipment operating procedures, and temperature settings, to prepare for storage.

Achievement Indicators: The learner:

	Yes	No
1. Identified fabric laundering requirements -		
2. Sorted garments as necessary -		
3. Selected temperature settings -		
4. Selected proper drying cycle -		
5. Filled tub with fabric -		
6. Added fabric conditioning product -		
7. Closed/sealed doors -		
8. Cycled fabric -		
9. Removed garments for folding -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related fabric requirements and/or the equipment operating manual.

Tools and Equipment:

Dryer
Fabric Care Products for Dryer
Drying Rack

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.
Product Information Label.
Equipment Operating Manual.

Duty: Performing Laundry Operations

Duty No. E

Task No. 6

Task: Fold laundry, using manual or machine method, to store/package laundry.

Achievement Indicators: The learner:

	Yes	No
1. Related folding steps/procedures -	____	____
2. Set/adjusted equipment -	____	____
3. Spread/set fabric for folding operation -	____	____
4. Brought corners together -	____	____
5. Folded in 1/2 or 1/3 until right size for storage -	____	____
6. Removed from folding machine -	____	____
7. Packaged/bagged garments -	____	____
8. Stored garments -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to procedures established by the supervisor and/or machine operating manual.

Tools and Equipment:

Folding Table
Folding Machine
Hangers
Packaging Material

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Performing Laundry Operations

Duty No. E

Task No. 7

Task: Press laundry, using flat, steam, or dry iron, to prepare for folding/storage.

Achievement Indicators: The learner:

	Yes	No
1. Set up ironing board -	____	____
2. Identified garment requirements -	____	____
3. Selected temperature -	____	____
4. Filled water reservoirs -	____	____
5. Identified related products and product information -	____	____
6. Set garment on pressing surface -	____	____
7. Applied fabric conditioner (sizing) products -	____	____
8. Applied heat directly or through pressing cloth -	____	____
9. Rotated fabric to repeat step -	____	____
10. Hung garment as required -	____	____
11. Cleaned iron surface as required -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related fabric requirements.

Tools and Equipment:

Flat Iron
Dry/Steam Iron

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Performing Laundry Operations

Duty No. E

Task No. 8

Task: Store solutions and soaps, using proper containers and safety procedures to maintain safe environment.

Achievement Indicators: The learner:

	Yes	No
1. Identified storage area and containers -	____	____
2. Set drums in racks -	____	____
3. Sealed drums/large containers -	____	____
4. Sealed all valves -	____	____
5. Locked cabinet/storage areas -	____	____
6. Removed all spilled products -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to procedure set forth by the supervisor and/or product information and warning labels.

Tools and Equipment:

Storage Cabinet

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Performing Building Repairs

Duty No. F

Task No. 1

Task: Measure/calculate materials using mathematical computation, incremented devices, and knowledge of material standards, to indicate layout steps.

Achievement Indicators: The learner:

	Yes	No
1. Performed mathematical computation -		
2. Performed accurate linear measure using a tape measure -		
3. Computed direct measure -		
4. Computed indirect measure -		
5. Measured liquid volume -		
6. Measured weight (mass) -		
7. Measured time -		
8. Measured angles on horizontal and vertical plane -		
9. Estimated material needed -		
10. Used knowledge of standard sizes and units to order/select materials -		
11. Performed problem solving using mathematical computation and measuring equipment -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to a level of accuracy set forth by the supervisor.

Tools and Equipment:

Measuring Tape
Liquid Measuring Proportioner
Scale
Clock
Protractor
Carpenter's Square

Resources:

Chatiner, Math for the Carpenter.
Delmar, Practical Problems in Math for the Carpenter, Mason, Electrician.
Educational Activities, Math for the Plumber.

Teacher Activities

Review

- Review basic math computation skills through pre-test.
- List why it is important.
- Review basic measurement and layout tools.

Overview

- Explain how accuracy and quality of work is dependent on the ability to estimate, mesaure, and compute.
- Demonstrate task that involves measuring and calculating and how it relates to job performance.

Presentation

- Demonstrate how tools and processes/procedure are used in performing tasks.
- List and show a variety of kinds of problems and problem solving activities (i.e., achievement indicators).

Exercise

- Have students practice what they have learned thorugh repetition. Simulation and problem solving activities.

Summary

- Summarize what has been learned by how it fits into the total job description, how it fits with other job tasks, and how it can be transferred to other skills or products.

Student Learning Activities

Exercise

- Have students solve practical mathematical problems.
- Simulate activities that involve measuring and calculating.
- View media and demonstration on measurement and layout tools and their applications.

Duty: Performing Building Repairs	**Duty No.** F **Task No.** 2

Task: Patch holes in plastered walls, using patching compound, application knife, and proper finishing procedures, to repair surface.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -		
2. Estimated material required for repair -		
3. Prepared wall surface -		
4. Installed backing if required -		
5. Applied patch compund (rough coat) -		
6. Sanded surface as required -		
7. Installed finish coats as required -		
8. Sanded surface as required -		
9. Cleaned and stored tools and materials -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Patching Compound PUtty Knife Sandpaper Backing Material	DCA Educational Products, Repairing a Hole in a Plasterboard Wall.

Duty:	Performing Building Repairs	**Duty No.**	F
		Task No.	3

Task: Repair damaged ceiling tile, using proper replacement material and fastener, to replace damaged tiles.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -	___	___
2. Estimated material needed for repair -	___	___
3. Removed damaged tile -	___	___
4. Prepared surface for installation -	___	___
5. Measured to perform cuts as needed -	___	___
6. Applied adhesive as necessary -	___	___
7. Installed ceiling tile -	___	___
8. Cleaned and stored tools -	___	___

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information.

Tools and Equipment:

Replacement Tile
Adhesive
Fasteners
Basic Hand Tools

Resources:

Weiss, Home Maintenance.

Duty: Performing Building Repairs	**Duty No.** F
	Task No. 4

Task: Repair damaged floor tile, using appropriate replacement materials, adhesive, and tools, to replace tile.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -	____	____
2. Estimated material needed for repair -	____	____
3. Removed damaged floor tile -	____	____
4. Removed adhesive as necessary -	____	____
5. Prepared floor surface for installation -	____	____
6. Applied tile adhesive according to product information -	____	____
7. Cut and installed tiles as needed -	____	____
8. Heated as required to insure smooth, flat floor surface -	____	____
9. Cleaned tools appropriately -	____	____
10. Stored tools and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related material and product information.

Tools and Equipment:

Replacement Tile
Adhesive
Utility Knife
Propane Torch
Scraper

Resources:

Weiss, Home Maintenance.
United Learning, Completing the Interior.

Duty: Performing Building Repairs

Duty No. F

Task No. 5

Task: Repair carpet, using proper tools and seaming procedures, to mend/replace material.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -	____	____
2. Estimated materials needed for repair -	____	____
3. Removed furniture as needed -	____	____
4. Removed base and/or trim as required -	____	____
5. Unsealed carpet as needed for repair -	____	____
6. Measured/marked carpeting for removal -	____	____
7. Cut carpeting for removal -	____	____
8. Applied adhesive/installed tack strip -	____	____
9. Performed seaming procedures as required -	____	____
10. Sealed carpeting to floor as required -	____	____
11. Replaced trim/base -	____	____
12. Cleaned and stores tools and materials -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Carpet Needle Thread
Seaming Tape
Falt Iron
Carpet Stretcher
Replacement Carpet
Carpet Knife
Basic Hand Tools

Resources:

Duty: Performing Building Repairs

Duty No. F

Task No. 6

Task: Repair windows, using knowledge of assembly/disassembly and installation procedures, to rebuild operating mechanism and replace parts.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -		
2. Estimated replacement material needed -		
3. Related operating principles of mechanism -		
4. Diagnosed problems -		
5. Disassembled operating mechanism/window structure according to product information -		
6. Repaired/replaced defective part -		
7. Assembled window according to manufacturer's information -		
8. Checked for smooth operation -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to manufacturer's information.

Tools and Equipment:

Basic Hand Tools
Window Replacement Parts

Resources:

Weiss, Home Maintenance.
United Learning, Windows.
Manufacturer's Information Manual.

Duty: Performing Building Repairs

Duty No. F

Task No. 7

Task: Replace windows, using knowledge of manufacturer's recommended disassembly procedures, appropriate tools, and equipment, to install pane.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -		
2. Estimated materials needed for repair -		
3. Removed window sash -		
4. Removed putty/gasket seal/window -		
5. Removed broken glass -		
6. Measured glass for cutting -		
7. Cut glass as needed for repair -		
8. Installed pane using putty/gasket seal -		
9. Installed sash -		
10. Cleaned glass/tools -		
11. Checked for air/water leaks -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the manufacturer's recommendations.

Tools and Equipment:

Glass Cutter
Putty Knife
Jointing Compound
Glazier Clips
Basic Hand Tools
Window Gasket/Seal

Resources:

Weiss, Home Maintenance.
Time Life, Basic Home Repair Series.
DCA Ed Products, Installing Glass in a Wood Sash.

Duty: Performing Building Repairs

Duty No. F

Task No. 8

Task: Repair a screen, using knowledge of patching technique and products, to mend holes.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -	____	____
2. Estimated materials needed for repair -	____	____
3. Removed screen frame from window if necessary -	____	____
4. Cut patch as required -	____	____
5. Applied mending product according to product information -	____	____
6. Wove wire to mend tear as necessary -	____	____
7. Replaced screen in window sash -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information.

Tools and Equipment:

Replacement Screen
Mending Wire
Patching Products
Gasket Material

Resources:

Weiss, Home Maintenance.
Manufacturer's Information Manual.

Duty: Performing Building Repairs

Duty No. F

Task No. 9

Task: Replace screen, using appropriate replacement and gasket material, to install new screen in frame.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -		
2. Estimated materials needed for repair -		
3. Removed screen from sash -		
4. Removed gasket material -		
5. Removed screen -		
6. Measured and cut new screens -		
7. Set screen in frame groove -		
8. Installed gasket -		
9. Installed screen in sash -		
10. Stored materials and tools -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Replacement Screen
Gasket Material
Scissors/Cutter
Hammer
Tape Measure
Thin/Tapered Board (18")

Resources:

DCA Ed. Products, Replacing a Screen in an Aluminum Frame.

Duty: Performing Building Repairs	**Duty No.** F **Task No.** 10

Task: Repair paint on interior and exterior surfaces, using knowledge of surface preparation and application procedures, to refinish surface.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -		
2. Estimated materials needed for repair -		
3. Set drop cloths - taped surfaces not to be painted -		
4. Cleaned surface -		
5. Scraped surface -		
6. Patched surface as required -		
7. Sanded surface as required -		
8. Applied paint using proper tool -		
9. Cleaned tools and equipment -		
10. Stored tools and equipment -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information.

Tools and Equipment:
Paint Scrapper
Putty Knife
Paint Brush
Paint Roller/Pan
Paint
Step Ladder
Drop Cloth

Resources:
Weiss, Home Maintenance.
DCA Ed. Products, Painting an Interior Wall, Painting an Exterior Wall.

Duty: Performing Building Repairs

Duty No. F

Task No. 1

Task: Maintain heating and cooling system, by adjusting unit and following cleaning and/or filter replacement schedule, to insure efficient operation.

Achievement Indicators: The learner:	Yes	No
1. Identified tools and materials needed for task -	___	___
2. Estimated materials needed for task -	___	___
3. Removed unit cover to access filter -	___	___
4. Removed filter -	___	___
5. Installed new filter checking air flow direction -	___	___
6. Checked for scheduled maintenance needs -	___	___
7. Oiled parts as required by equipment information -	___	___
8. Cleaned unit as needed -	___	___
9. Measured unit's operating temperature -	___	___
10. Adjusted vent for proper flow -	___	___
11. Replaced unit cover -	___	___

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment operating manual.

Tools and Equipment:

Forced Air System
Furnace Filter
Thermometer
Basic Hand Tools

Resources:

Weiss, Home Maintenance.
Singer Career Systems, Cleaning and Replacing Furnace Filters.
Manufacturer's Operating Manual.

Duty: Performing Building Repairs	**Duty No.** F **Task No.** 12

Task: Repair/install locksets, using knowledge of installation and assembly instruction, to replace/adjust mechanism.

Achievement Indicators: The learner:	Yes	No
1. Checked unit operation -	____	____
2. Checked lock mechanism operation -	____	____
3. Disassembled unit -	____	____
4. Located and replaced worn/defective parts -	____	____
5. Assembled lockset -	____	____
6. Checked hinges -	____	____
7. Adjusted door for proper fit -	____	____
8. Checked closer operation -	____	____
9. Adjusted closer for proper operation -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:	**Resources:**
Replacement Parts Basic Hand Tools	Weiss, Home Maintenance. United Learning, Doors. DCA Ed. Products, Installing a Lockset.

Duty: Performing Building Repairs

Duty No. F

Task No. 1

Task: Repair furniture, using proper glueing, mending, or refinishing procedures, to mend damage.

Achievement Indicators:

The learner:	Yes	No
1. Checked piece for repair needs -	____	____
2. Disassembled as required for repair -	____	____
3. Prepared surface for mending -	____	____
4. Identified proper adhesive/fasteners necessary -	____	____
5. Applied adhesive according to product information -	____	____
6. Clamped area as required -	____	____
7. Performed surface finishing/refinishing as required -	____	____
8. Assembled furniture -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to requirements set down by the supervisor.

Tools and Equipment:

Basic Hand Tools
Adhesives
Fasteners
Furniture Stain
Furniture Finish

Resources:

Time Life, Home Repair and Improvement.
Prentice Hall, Producing Joints.
Weiss, Home Maintenance.

Duty: Performing Building Repairs

Duty No. F

Task No. 14

Task: Repair drywall, using proper installation and finishing procedures, to fix damaged wall/ceiling surfaces.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -	____	____
2. Estimated material needs -	____	____
3. Removed damaged drywall -	____	____
4. Cut area to expose wall studs -	____	____
5. Measured and cut replacement wallboard -	____	____
6. Installed replacement -	____	____
7. Performed jointing and taping to seam joints -	____	____
8. Sanded joint surfaces according to jointing procedures-	____	____
9. Refinished wall surface to match existing wall covering -	____	____
10. Cleaned and stored stools and materials -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Drywall Knife
Utility Knife
Jointing Compound
Drywall Tape
Sand Paper
Adhesive
Fasteners/Hammer

Resources:

Weiss, Home Maintenance.
DCA Ed. Products, Repairing a Plasterboard Wall.

Duty: Performing Building Repairs

Duty No. F

Task No. 15

Task: Repair/install paneling, using proper layout and cutting tools, adhesives/fasteners, and installation procedures, to replace damaged section.

Achievement Indicators: The learner:

The learner:	Yes	No
1. Identified tools and materials needed for repair -	____	____
2. Estimated materials needed for repair -	____	____
3. Removed damaged sheet -	____	____
4. Prepared wall surface for installation -	____	____
5. Layed out cut for replacement material -	____	____
6. Cut replacement material -	____	____
7. Applied adhesive according to product information -	____	____
8. Installed replacement paneling -	____	____
9. Stored tools and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Paneling
Adhesive
Fasteners
Circular Saw with Blade
Seams and Corners

Resources:

Time Life, Home Improvement Series, Guide to Paneling and Wallpaper.
Weiss, Home Maintenance.

Duty: Performing Building Repairs

Duty No. F

Task No. 16

Task: Apply/repair wallpaper, using paste or repair adhesive, appropriate tools, and materials, to match existing pattern.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -	____	____
2. Estimated materials needed for repair -	____	____
3. Determined "pattern repeat" according to production information -	____	____
4. Prepared adhesive as required -	____	____
5. Prepared wall surfaces as necessary -	____	____
6. Layed out wall surface for installation -	____	____
7. Cut wallpaper as required -	____	____
8. Applied wallpaper to wall surface -	____	____
9. Leveled/straightened wallpaper -	____	____
10. Brushed surface -	____	____
11. Checked work for accuracy, trimmed as required -	____	____
12. Cleaned/stored tools and materials -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to product and material information.

Tools and Equipment:

Wallpaper Brush
Roller
Plumb Bob
Razer Knife
Tape Measure

Resources:

Weiss, Home Maintenance.
McGraw Hill, Guide to Wallpaper and Paint, Guide to Paneling and Wallpaper.

Duty: Performing Building Repairs

Duty No. F

Task No. 1

Task: Repair doors/jambs, using knowledge of installation procedures and tool operation, to adjust/replace defective material.

Achievement Indicators:

The learner:	Yes	No
1. Identified tools and materials needed for repair -	____	____
2. Estimated materials needed for task -	____	____
3. Removed door and necessary hardware -	____	____
4. Removed casing -	____	____
5. Removed fasteners securing jamb -	____	____
6. Installed replacement jamb -	____	____
7. Shimed/leveled jamb -	____	____
8. Cut mortise as required in replacement jamb/doors -	____	____
9. Replaced door hardware -	____	____
10. Hung door -	____	____
11. Replaced casing -	____	____
12. Finished/painted new surfaces -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Plane
Basic Hand Tools
Fasteners
Level
Saw (Circular)

Resources:

Weiss, Home Maintenance.
Prentice-Hall Media, Doors.

Duty: Performing Building Repairs

Duty No. F

Task No. 18

Task: Apply pesticides, using proper equipment and product proportions, to eliminate insect population.

Achievement Indicators:

The learner:	Yes	No
1. Identified equipment and products necessary -	____	____
2. Identified product information -	____	____
3. Proportioned products as necessary -	____	____
4. Applied product to proper areas -	____	____
5. Operated application equipment properly -	____	____
6. Cleaned/stored equipment and products -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related product information.

Tools and Equipment:

Pesticide Product
Spray Equipment
Face Mask
Rubber Gloves
Produce Proportioner

Resources:

Product Information Label.
Equipment Operating Manual.

Duty: Performing Building Repairs	**Duty No.** F
	Task No.

Task: Control rodents, using traps, chemical and/or building repair procedures, to reduce/eliminate rodent population.

Achievement Indicators: The learner:

	Yes	No
1. Identified rodent traffic areas -		
2. Identified necessary structural repairs -		
3. Completed building repairs to reduce access inside building -		
4. Identified product information -		
5. Set trap/chemical feeders -		
6. Checked/emptied traps -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information.

Tools and Equipment:	**Resources:**
Rodent Traps Rodent Control Chemicals	Product Information Label.

Duty:	Performing Plumbing Repairs	**Duty No.**	G
		Task No.	1

Task: Identify pipe sizes and schedules, using knowledge of standard sizes and inside and outside dimensions, to order/purchase piping.

Achievement Indicators: The learner:	Yes	No
1. Identified inside dimensions -		
2. Identified outside dimensions -		
3. Identified pipe by material -		
4. Identified pipe by weight -		
5. Identified standard thread sizes -		
6. Read pipe size and weight table -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to established standards of pipe size and weight of the plumbing supply.

Tools and Equipment:

Resources:

Slater and Smith, Basic Plumbing.
Educational Activities, Inc., Math for the Plumber.

Teacher Activities

Review

- Review student status in decimal and fractional measures through pre-test.
- Ask questions about standard sizes in other areas such as nails, screws, clothing, etc.
- Review how to read and interpret information from charts and schedules.

Overview

- Tell waht is to be taught and why it is important in relation to measuring and calculating materials, ordering materials, and meeting state/local plumbing codes.

Presentation

- Present samples of different types and sizes of pipe.
- Present uses and applications of pipe in relation to building codes.
- Provide charts and tables of pipe sizes and weight for students to interpret information.
- Review related audio visual media and workbook exercises.

Exercise

- Complete exercises and activities to practice what has been learned.

Summary

- Summarize what has been learned in how it fits with other job tasks or skills and how it can be transferred to other skills or products.

Student Learning Activities

Exercise

- Review related media.
- Have students practice interpreting information from related charts and tables.
- Have student complete a materials record or form for otherplumbing task in which they have to document pipe and fitting sizes.
- Complete workbook and study questions relating to identifying pipe sizes and weights.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 2

Task: Identify fitting, using knowledge of schedule, angles, metals and compiling procedures, to select proper fitting for installation.

Achievement Indicators: The learner:

	Yes	No
1. Identified inside dimension -	____	____
2. Identified outside dimension -	____	____
3. Identified fitting by material/weight -	____	____
4. Identified angle of bend -	____	____
5. Identified standard thread sizes -	____	____
6. Identified fitting by name and function -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to established standards of the plumbing supply manufacturer.

Tools and Equipment:

Resources:

Slater and Smith, Basic Plumbing.
Weiss, Home Maintenance.
Educational Activities, Inc., Math for the Plumber.

Duty: Performing Plumbing Repairs	**Duty No.** G **Task No.** 3

Task: Cut pipe, using knowledge of pipe sizes and schedules and proper cutting and reaming tools, to prepare pipe for fitting.

Achievement Indicators: The learner:

	Yes	No
1. Identified cutting tools necessary for task -	____	____
2. Measured pipe for cut (measuring in combination with inside, center, outside of fitting) -	____	____
3. Performed cutting operation -	____	____
4. Reamed cut section -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Pipe/Tubing Cutter
Reamer
Tape Measure

Resources:

Slater and Smith, Basic Plumbing.
DCA Ed. Products, Cutting and Threading Pipe.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 4

Task: Join pipe, using knowledge of sweating, threading, solvent and welding procedures and tools, to join pipe sections.

Achievement Indicators: The learner:

	Yes	No
1. Used proper safety apparel -	____	____
2. Set up work area -	____	____
3. Lit propane torch -	____	____
4. Applied flux and heat to point -	____	____
5. Applied solder as necessary to secure joint -	____	____
6. Selected proper thread cutting tool -	____	____
7. Installed tap/die in stock -	____	____
8. Applied cutting oil -	____	____
9. Cut threads (insude/outside) as required -	____	____
10. Selected proper rod and setting -	____	____
11. Performed arc welding to join pipe -	____	____
12. Stored tools and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction and the state/local plumbing codes.

Tools and Equipment:

Pipe Dies

Resources:

Weiss, Home Maintenance.
Slater and Smith, Basic Plumbing.
DCA Educational Products, Soldering Copper Tubing, Cutting and Threading Pipe.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 5

Task: Replace seal washers, using knowledge of tools, equipment and assembly/disassembly procedures, to rebuild faucet.

Achievement Indicators:

The learner:	Yes	No
1. Shut off water supply -		
2. Identified tools and equipment needed for repair -		
3. Identified replacement part -		
4. Removed faucet handle -		
5. Disassembled faucet assembly -		
6. Removed top washer -		
7. Reset housing if required -		
8. Installed replacement washer -		
9. Assembled faucet -		
10. Opened water supply -		
11. Checked housing for leaks -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Adjustable Wrench
Screwdriver
Replacement Parts
Seating Tool

Resources:

Weiss, Home Maintenance.
Slater and Smith, Basic Plumbing.
DCA Ed. Products, Replacing a Faucet Washer.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 6

Task: Install watercloset, using proper fitting tools and seals, to insure proper operation.

Achievement Indicators: The learner:	Yes	No
1. Identified tools needed for task -		
2. Identified materials needed for task -		
3. Installed seal -		
4. Installed stool fixture to waste pipe -		
5. Leveled and shimeed stool -		
6. Attached tank using seals/gaskets -		
7. Installed flush valve mechanism as required -		
8. Hooked up water supply -		
9. Opened water supply - checked for leaks -		
10. Flushed toilet - checked for leaks -		
11. Cleaned fixture - stored tools -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to state/local plumbing standards.

Tools and Equipment:

Adjustable Wrench
Screwdriver
Replacement Parts
Seating Tool

Resources:

Weiss, Home Maintenance.
Slater and Smith, Basic Plumbing.
DCA Ed. Products, Replacing a Faucet Washer.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 7

Task: Install sink, using knowledge of waste pipe and fitting sizes, tools, and installation clips, to hook up and seal sink.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and equipment needed for task -	____	____
2. Estimated materials needed for task -	____	____
3. Identified installation procedures -	____	____
4. Applied sealant to sink rim -	____	____
5. Installed clips to secure sink -	____	____
6. Installed sink drain -	____	____
7. Hooked in waste pipe -	____	____
8. Stored tools and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to state/local plumbing standards.

Tools and Equipment:

Basic Hand Tools
Sink Clips
Calking
Calking Gun
Waste Pipe System

Resources:

Weiss, Home Maintenance.
Slater and Smith, Basic Plumbing.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 8

Task: Repair faucets, using proper tools, replacement parts, and knowledge of assembly and disassembly procedures, to stop leaks.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and equipment needed for repair -	____	____
2. Estimated materials needed for repair -	____	____
3. Shut off water supply -	____	____
4. Disassembled faucet -	____	____
5. Diagnosed cause of leak -	____	____
6. Installed replacement parts or used repair procedure as needed -	____	____
7. Assembled faucet -	____	____
8. Turned on water supply - checked for leaks and proper operation -	____	____
9. Stored tools and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Screwdriver
Adjustable Wrench
Seating Tool

Resources:

Slater and Smith, Basic Plumbing.
Weiss, Home Maintenance.
DCA Ed. Products, Repairing a Washerless Faucet.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 9

Task: Repair ball-type flush valve, using proper tool procedures and replacement parts, to restore/insure efficient operation.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and equipment needed for repair -		
2. Identified replacement parts needed for repair -		
3. Identified procedures of installation of replacement parts -		
4. Shut off water supply -		
5. Removed flush valve housing -		
6. Installed replacement parts -		
7. Assembled valve housing -		
8. Turned on water supply -		
9. Checked for leaks and proper operation -		
10. Cleaned and stored tools and equipment -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the manufacturer's recommendations.

Tools and Equipment:

Screwdriver
Adjustable Wrench
Replacement Parts

Resources:

Slater and Smith, Basic Plumbing.
Weiss, Home Maintenance.
DCA Ed. Products, Replacing a Ball Cock Plunger Washer.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 10

Task: Repair diaphragm flush valve, using proper tools, procedures, and replacement parts, to restore efficient operation.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools needed for repair -		
2. Identified materials needed for repair -		
3. Shut down water supply -		
4. Disassembled valve -		
5. Installed replacement parts -		
6. Assembled valve -		
7. Returned water supply -		
8. Checked for leaks, adjusted flow -		
9. Stored tools and equipment -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to manufacturer's recommendations.

Tools and Equipment:

Adjustable Wrench
Screwdriver
Plumbers Putty
Replacement Valve/Parts

Resources:

Slater and Smith, Basic Plumbing.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 11

Task: Repair a water heater, using knowledge of startup and shut-down procedures, safety requirements, and principles of operation, to insure equipment operation.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for repair -		
2. Shut down power/fuel source -		
3. Closed water supply - drained tank -		
4. Removed cover plates -		
5. Checked wiring -		
6. Checked thermostats -		
7. Pulled heating elements - checked -		
8. Replaced worn/defective parts -		
9. Filled tank -		
10. Checked for leaks -		
11. Started up tank operations -		
12. Checked for proper operation -		
13. Stored tools and equipment -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to equipment operating manual.

Tools and Equipment:

Screwdrivers
Wrench Set
Electrical Tester
Propane Torch/Tip
Solder/Flux
Replacement Parts

Resources:

Slater and Smith, Basic Plumbing.
Prentice Hall Media, Rough Plumbing and Heating.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 12

Task: Repair a drinking fountain, using knowledge of plumbing, electrical, and refrigeration principles, to insure efficient operation.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools needed for repair -	____	____
2. Shut off water supply -	____	____
3. Removed housing/covers as required -	____	____
4. Checked electrical circuits as required -	____	____
5. Checked for signs of leak -	____	____
6. Diagnosed repair problem -	____	____
7. Recharged refrigeration unit as required -	____	____
8. Cleaned coils -	____	____
9. Returned water/electrical flow -	____	____
10. Checked for efficient operation -	____	____
11. Stored tools and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to state and local building code requirements and/or manufacturer's recommendations.

Tools and Equipment:

Basic Hand Tools
Electrical Tester
Propane Torch
Refrigeration Coolant
Replacement Parts

Resources:

Slater and Smith, Basic Plumbing.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 1[illegible]

Task: Repair a disposal, using knowledge of plumbing and electrical principles, and installation procedures, to insure efficient operation.

Achievement Indicators: The learner:	Yes	No
1. Identified tools and materials needed for repair -	____	____
2. Checked for free operation of moving parts -	____	____
3. Freed mechanism of material -	____	____
4. Checked electrical circuits/switches -	____	____
5. Repaired leaks as required -	____	____
6. Checked unit motor operation -	____	____
7. Diagnosed defective part -	____	____
8. Ordered parts and/or repaired unit -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to equipment operating manual.

Tools and Equipment:

Basic Hand Tools
Electrical Tester
Wet/Dry Vacuum

Resources:

McGraw Hill Book Company, Guide to Plumbing.
Equipment Operating Manual.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 14

Task: Unclog drains and traps, using hand and mechanical equipment, chemicals and/or knowledge of pipe and fitting installation, to clean blockage.

Achievement Indicators:

The learner:	Yes	No
1. Identified tools and equipment and accessories needed for task -	____	____
2. Identified product information -	____	____
3. Located area of clog -	____	____
4. Evacuated standing water -	____	____
5. Proportioned product according to product information -	____	____
6. Set up equipment/tools -	____	____
7. Snaked out waste pipe -	____	____
8. Dismantled waste pipe/trap as required -	____	____
9. Replaced damaged or worn pipe -	____	____
10. Cleaned/stored tools and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information.

Tools and Equipment:

Drain Auger
Chemical Products
Basic Hand Tools

Resources:

Weiss, Home Maintenance.
Slater and Smith, Basic Plumbing.
Singer Career Systems, Using a Drain Auger.
Product Information Label.

Duty: Performing Plumbing Repairs

Duty No. G

Task No. 1

Task: Install waste pipe system, using knowledge of standard sizes, fittings, and coupling techniques, to insure system flow.

Achievement Indicators: The learner:

		Yes	No
1.	Identified tools and equipment needed for task -	____	____
2.	Related appropriate information concerning local and state codes -	____	____
3.	Diagnosed waste system -	____	____
4.	Determined pipe and fitting needs -	____	____
5.	Measured/layed out for waste system -	____	____
6.	Cut pipe -	____	____
7.	Coupled pipe and fittings -	____	____
8.	Hung pipe -	____	____
9.	Checked system for leaks -	____	____
10.	Stored tools and equipment.		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to state and/or local building and plumbing codes.

Tools and Equipment:

Basic Hand Tools
PVC Pipe/Fitting
Steel Pipe and Fittings
Adhesives (PVC)
Cutter
Saw

Resources:

Slater and Smith, Basic Plumbing.

Duty: Performing Electrical Repairs

Duty No. H

Task No. 1

Task: Select electrical tools and materials, using knowledge of circuit components, tool/equipment function, and principle of operations, to set up job requirements.

Achievement Indicators: The learner:

	Yes	No
1. Refined basic electrical terms -	____	____
2. Identified basic electrical tools/materials by name -	____	____
3. Identified basic electrical tools by function -	____	____
4. Identified basic wiring diagrams and symbols -	____	____
5. Identified electrical conductors by gauge, function and current capacity -	____	____
6. Identified types of conduits, raceways by size and type, name -	____	____
7. Identified common electrical boxes -	____	____
8. Identified types of switches and receptacles -	____	____
9. Identified typical service requirements of appliances and electrical equipment -	____	____
10. Related basic wiring procedures -	____	____
11. Ordered electrical supplies as required by task -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the policies and procedures set forth by the supervisor.

Tools and Equipment:

Resources:

DCA Educational Products, Electrical Series.
Mix, Housewiring Simplified.
Prentice Hall Media, Electrical Housewiring Components of AC Circuits.

Teacher Activities

Review

- Review what has been taught to date.
- Assess student knowledge through pre-test or related exercises.

Overview

- Explain why it is improtant to understand all components of this task in terms of safety and work quality.

Presentation

- Present tools, equipment, and material by name and function. Demonstrate through simulated activities how they are utilized in performing the tasks.

Exercise

- Have students practice the skills they have learned through performing related tasks.
- Have students complete planning forms/ record and/or logs of their activities that include tasks, tools and material.

Summary

- Summarize through instructor and/or guest speaker how what has been learned relates to other job tasks or skills and how it can be transferred to other skills or products.

Student Learning Activities

Exercise

- Review related audio-visual media.
- Complete text and workbook assignments related to task.
- View instructor demonstration of tasks, tools and materials.
- Practice/perform the activities and job steps related to performing tasks.
- Complete problem solving activities through planning and estimating jobs that involve related tasks.

Duty: Performing Electrical Repairs

Duty No. H

Task No. 2

Task: Practice electrical safety procedures, using knowledge of basic safety rules and electrical principles, to maintain safe environment and work area.

Achievement Indicators: The learner:

	Yes	No
1. Related basic safety systems of electrical circuits -	____	____
2. Demonstrated use of safety requipment and procedures -	____	____
3. Identified basic safety rules concerning electrical safety -	____	____
4. Demonstrated emergency procedures for freeing electrical shock victim -	____	____
5. Demonstrated basic first aide for treating electrical shock victim -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to policies set forth by the supervisor and first aid procedure set forth by the American Red Cross.

Tools and Equipment:

Resources:

Weiss, Home Maintenance.
Mix, Housewiring Simplified.
Singer Career Systems, Locating Defective Circuit Parts.
Prentice Hall Media, Electrical Series.

Duty: Performing Electrical Repairs	**Duty No.** H
	Task No. [illegible]

Task: Replace plugs on electrical cords, using approved replacement parts and installation procedures, to wire connections.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools, materials, equipment required for task -	____	____
2. Related basic installation procedure for installing equipment -	____	____
3. Identified hot, neutral and/or ground wires -	____	____
4. Removed damaged/defective plug -	____	____
5. Inspected wire for damage or wear -	____	____
6. Disassembled replacement plug as required -	____	____
7. Connected conductors to proper poles -	____	____
8. Inspected work for accuracy -	____	____
9. Assembled replacement plug as required -	____	____
10. Chwcked current for proper operation -	____	____
11. Stored tools and equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to U L approved procedures.

Tools and Equipment:

Screwdriver
Electrical Pliers
Wire Stripper
Replacement Plug

Resources:

Mix, Electrical Housewiring.
Weiss, Home Maintenance.
DCA Educational Products, Replacing a Defective Plug.

Duty:	Performing Electrical Repairs	**Duty No.**	H
		Task No.	4

Task: Install single pole switches and receptacles, using knowledge of electrical principles, using diagram and approved equipment and procedures, to connect fixture.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools, materials and equipment need for task -		
2. Identified proper wiring diagram as required for task -		
3. Shut down power to circuit -		
4. Identified basic installation procedures and codes for installing equipment -		
5. Stripped sheathing and insulation as required -		
6. Connected conductors as required by diagram -		
7. Capped/covered bare connections -		
8. Restored power - checked for proper operation -		
9. Shut down power - installed switch and/or receptacles in boxes -		
10. Installed covers/plates -		
11. Stored tools and equipment -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to U L approved equipment and procedures and local/state electrical code.

Tools and Equipment:

Sheathing Stripper
Wire Stripper
Electrical Pliers
Screwdriver
Electrical Tester

Resources:

Mix, Housewiring Simplified.
Prentice Hall Media, Electrical Housewiring.
DCA Ed. Products, Electrical Series.

Duty:	Performing Electrical Repairs	**Duty No.**	H
		Task No.	

Task: Replace flourescent light, using proper assembly/disassembly and installation procedures, to install fixture.

Achievement Indicators: The learner:	Yes	No
1. Identified materials needed for task -	____	____
2. Set up ladder -	____	____
3. Opened fixture cover as required -	____	____
4. Rotated bulb for removal -	____	____
5. Inserted replacement bulb and rotated for installation -	____	____
6. Cleaned fixture and cover -	____	____
7. Closed fixture cover -	____	____
8. Stored materials -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to manufacturer's recommendations.

Tools and Equipment:

Screwdriver
Replacement Bulb
Cleaning Cloth

Resources:

Singer Career Systems, Repairing a Flourescent Light.

Duty: Performing Electrical Repairs

Duty No. H

Task No. 6

Task: Install 3-way light switches and fixture, using knowledge of wiring diagrams, approved materials and electrical wire types, to connect switches and fixtures.

Achievement Indicators: The learner: Yes No

1. Identified tools, equipment and materials needed for task - ____ ____
2. Identified proper wiring diagram needed for task - ____ ____
3. Related local and/or state codes that apoly to task - ____ ____
4. Selected/estimated conductors, boxes, switches and fixtures as needed - ____ ____
5. Installed boxes - ____ ____
6. Ran wire according to diagram - ____ ____
7. Shut down power as required - ____ ____
8. Installed switches and fixtures according to diagram and code - ____ ____
9. Hooked circuit into power source - ____ ____
10. Returned power - checked for proper operation - ____ ____
11. Shut down power - ____ ____
12. Installed covers/plages - ____ ____
13. Stored tools and equipment - ____ ____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to state/local electrical codes and approved wiring diagram.

Tools and Equipment:

Electrical Wire
Switch Boxes
3-way Switches
Light Fixture
Wire Stripper
Screwdriver
Tester Pliers

Resources:

Mix, Housewiring Simplified.
United Learning, Electricity Principals.

Duty: Performing Electrical Repairs

Duty No. H

Task No.

Task: Wire pig tail, using knowledge of plug types and connectors, to install wire and plug.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and materials needed for task -	____	____
2. Determined material requirements according to appliance/equipment information -	____	____
3. Shut down power -	____	____
4. Removed cover/plate on appliances -	____	____
5. Determined hot and ground poles -	____	____
6. Connected appropriate wires to poles -	____	____
7. Replaced cover/plate -	____	____
8. Returned power - checked for proper operation -	____	____
9. Stored tools and materials -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the equipment manufacturer's recommendations.

Tools and Equipment:

Pig Tail
Screwdriver
Pliers

Resources:

Equipment Wiring Diagram.

Duty: Performing Electrical Repairs

Duty No. H

Task No. 8

Task: Wire breaker/panel, using knowledge of service requirements and electrical principles, to install components.

Achievement Indicators: The learner:

		Yes	No
1.	Determined service requirements through electrical blueprints and wattage needed for appliances -	____	____
2.	Layed out circuit arrangement -	____	____
3.	Shut down service power by removing main as required -	____	____
4.	Identified circuit lines in box -	____	____
5.	Removed sheathing and conductor insulation -	____	____
6.	Installed hot neutral and ground wires according to needs and requirements -	____	____
7.	Installed conductors for 220 volt service -	____	____
8.	Checked work for accuracy -	____	____
9.	Returned power - checked circuits for proper installation -	____	____
10.	Labeled breaker information on panel cover -	____	____
11.	Replaced panel covers -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to state and/or local electrical codes.

Tools and Equipment:

Circuit Diagram
Electrical Pliers
Circuit Tester
Circuit Breakers
Screwdriver
Wire Stripper
Sheathing Stripper

Resources:

Mix, Electrical Housewiring.
United Learning, Electricity Principals.

Duty: Performing Electrical Repairs

Duty No. H

Task No. 9

Task: Wire electric motors, using knowledge of electrical principles and wiring diagrams, to insure efficient operation.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools, equipment and materials needed for task -		
2. Determined material requirements according to equipment information -		
3. Identified/determined circuit diagram -		
4. Installed conduit and boxes as required -		
5. Ran conductor from electrical service to motor -		
6. Installed conductor to proper breaker and/or switches -		
7. Removed conductor sheathing and insulation -		
8. Mounted motor as required by equipment information -		
9. Installed connector as required -		
10. Removed plate/covers from motor -		
11. Identified poles for conductor installation -		
12. Connected wires -		
13. Replaced plates and/or covers -		
14. Checked for efficient operation -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to manufacturer's recommendations and state/local electrical codes.

Tools and Equipment:

Screwdriver
Wire Stripper
Electrical Pliers
Hammer/Fasteners
Basic Hand Tools

Resources:

United Learning, Electricity Principals.

Duty: Performing Electrical Repairs

Duty No. H

Task No. 10

Task: Troubleshoot circuits, using knowledge of test equipment, electrical principles and using diagrams, to diagnose/correct problem.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and equipment used to test circuits -	____	____
2. Identified procedures implemented to utilize tools and equipment for testing -	____	____
3. Identified symbols and material components from wiring diagram -	____	____
4. Traced the flowpath of a circuit from the wiring diagram -	____	____
5. Identified safety systems of a circuit -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Electrical Meter
Circuit Tester

Resources:

Prentice Hall Media, Electrical Housewiring.
Mix, Basic Electricity.

Duty: Maintaining Grounds	**Duty No.** I
	Task No. 1

Task. Cut lawn, using cutting, trimming, and cleanup equipment, to maintain lawn.

Achievement Indicators: The learner:

	Yes	No
1. Identified tools and equipment used to cut lawns -	____	____
2. Identified safety equipment and procedures associated with tools and equipment -	____	____
3. Checked and filled flouid and fuel levels of equipment -	____	____
4. Proportioned fuel and fluid mixtures as required by equipment information -	____	____
5. Removed hazardous objects from lawn surface -	____	____
6. Started equipment engine as required -	____	____
7. Engaged cutting equipment -	____	____
8. Cut lawn using most efficient cutting pattern -	____	____
9. Trimed and edged lawn perimeter -	____	____
10. Trimed around trees, bushes, and structures -	____	____
11. Stored tools and equipment properly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related equipment operating manual.

Tools and Equipment:

Lawn Mower
Lawn Trimmer
Gasoline/Oil
Rake
Broom
Edging Tool

Resources:

Teacher Activities

Review

- Determine what tasks are necessary for outdoor maintenance.
- Review equipment necessary for performing job steps of each task.

Overview

- Explain what is going to be learned and why it is important.
- Relate necessary equipment to operational and safety requirements as well as work quality.

Presentation

- Explain equipment necessary for task.
- Review operating manual.
- Identify parts by name and function as well as accessory equipment.
- Demonstrate different cutting paths for most efficient use of time and for safety.

Exercise

- Have students practice what they have learned by operating equipment and by simulating and/or performing job activities.

Summary

- Summarize what has been learned and evaluate through post-test or equipment operating evaluation. Relate how what has been learned fits with other job tasks and how it can be transferred to other skills or equipment.

Student Learning Activities

Exercise

- Review related equipment manual (operating).
- Use equipment to perform job steps or to simulate job steps.

Duty: Maintaining Grounds

Duty No. I

Task No. 2

Task: Seed lawn, using knowledge of grass and application requirements and spreading equipment, to grow grass.

Achievement Indicators: The learner:	Yes	No
1. Identified equipment needed for task -	____	____
2. Related growing conditions necessary for different types of grasses -	____	____
3. Related environmental conditions of plot/lawn -	____	____
4. Determined seed type or mixture for seeding--	____	____
5. Determined amount of seed necessary for seeding -	____	____
6. Set flow of spreading equipment -	____	____
7. Filled spreading equipment -	____	____
8. Applied seed to lawn or plot -	____	____
9. Watered seed for germination -	____	____
10. Cleaned and stored equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related product information.

Tools and Equipment:

Lawn Spreader
Hose
Sprinkler/System

Resources:

Duty: Maintaining Grounds

Duty No. I

Task No. 3

Task: Apply weed killer, using knowledge of product proportions and application procedures/requirements, to kill weeds.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment and products necessary for task -		
2. Related appropriate product information -		
3. Set up spray (spreading equipment) -		
4. Estimated product requirement/needs for lawn/ plot -		
5. Proportioned production properly -		
6. Filled reservoirs -		
7. Pumped up air pressure as required -		
8. Applied product -		
9. Cleaned/stored equipment and products -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related product information.

Tools and Equipment:

Product Proportioner
Weed Killer
Lawn Spreader
Spraying Equipment

Resources:

Product Information Label.

Duty: Maintaining Grounds	**Duty No.** I **Task No.** 4

Task: Water lawn, using automatic and manual watering systems, to maintain lawn.

Achievement Indicators: The learner:

	Yes	No
1. Set up sprinkler (self tracking) -	____	____
2. Attached hose -	____	____
3. Turned on water, adjusted for proper flow -	____	____
4. Opened valve for watering system -	____	____
5. Set timer for automatic system -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related equipment/system's operation manual.

Tools and Equipment:

Hose
Sprinkler
Watering System

Resources:

Duty: Maintaining Grounds

Duty No. I

Task No.

Task: Fertilize lawn, using knowledge of product proportions, application procedures, and turf requirements, to maintain grounds.

Achievement Indicators: The learner:

	Yes	No
1. Identified equipment and products necessary for task -	____	____
2. Related appropriate product information -	____	____
3. Determined turf requirements through product information and soil environmental conditions -	____	____
4. Determined amount of product necessary for task -	____	____
5. Proportioned product as required -	____	____
6. Set up spreading/spray equipment -	____	____
7. Applied fertilizer according to product information and application procedures -	____	____
8. Stored equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related equipment operating instructions and product information.

Tools and Equipment:

Lawn Fertilizer
Lawn Spreader
Spraying Equipment

Resources:

Product Information Label.

Duty: Maintaining Grounds	**Duty No.** I **Task No.** 6

Task: Clean parking area, using debris and/or snow removal equipment, to maintain parking surfaces.

Achievement Indicators: The learner:	Yes	No
1. Picked up and deposited litter and debris in disposal container -	____	____
2. Swept dirt and glass from parking area -	____	____
3. Set up brushing/plowing equipment -	____	____
4. Operated brushing and plowing equipment to remove debris/snow -	____	____
5. Cleaned stored equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to related equipment operating instructions.

Tools and Equipment:	**Resources:**
Broom (Push) Snow Plow/Thrower Snow Shovel	Equipment Operating Manual.

Duty: Maintaining Grounds

Duty No. I

Task No. 7

Task: Prune large trees, using appropriate equipment and methods, to maintain/ improve plants health/appearance.

Achievement Indicators: The learner:

	Yes	No
1. Selected part of plant to remove -	____	____
2. Used correct pruning techniques including cutting and treating of wound -	____	____
3. Used ropes and tree saddles for climbing trees -	____	____
4. Selected correct time to prune -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor.

Tools and Equipment:

Chain saws
Pruning saws
Pole pruners
Ropes and saddles
Wound compound
Mallet, chisel
Work order form
Customer

Resources:

Duty: Maintaining Grounds

Duty No. I

Task No. 8

Task: Prune deciduous shrubs, using appropriate equipment and methods, to maintain/improve plants health/appearance.

Achievement Indicators: The learner: Yes No

1. Selected parts of plant to remove:
   Diseased parts, dead parts
   Broken limbs
   Crossovers ____ ____
2. Selected time of year to:
   Prune flowering shrubs; immediately after flowering
   Used correct pruning procedures - ____ ____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor.

Tools and Equipment:

Hand pruners
Hoppers
Customer work order
Spray wound compound

Resources:

Duty: Maintaining Grounds

Duty No. I

Task No. 9

Task: Prune narrow leaf evergreens, using appropriate equipment and methods, to maintain and improve plants health and appearance.

Achievement Indicators:

The learner:	Yes	No
1. Used shearing or pruning techniques as dictated by previous methods of handling plants -	____	____
2. Used correct shearing or pruning techniques -	____	____
3. Applied wound compound on all wounds larger than one inch -	____	____
4. Determined which limbs to remove, and time to prune -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor.

Tools and Equipment:

- Hedge shears
- Hand pruners
- Hoppers
- Pruning saws
- Customer work order

Resources:

Duty: Maintaining Grounds

Duty No. I

Task No. 10

Task: Prune broad leaf evergreen, using appropriate equipment and methods, to maintain/improve plants health/appearance.

Achievement Indicators:

The learner:	Yes	No
1. Used proper pruning techniques and proper tools for the job -	____	____
2. Adhered to shearing technique in holly if it has been previously used -	____	____
3. Chose proper time of year to prune -	____	____
4. Applied wound dressing to wounds over one inch in diameter -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor.

Tools and Equipment:

Loppers
Shears
Hand pruners
Wound compound
Customer work order

Resources:

Duty: Maintaining Grounds

Duty No. I

Task No. 11

Task: Prune hedges, using appropriate equipment and methods, to maintain/improve hedges health/appearance.

Achievement Indicators:

The learner:	Yes	No
1. Identified hedge plants -	____	____
2. Used correct shearing techniques and shaped hedge to form best design to admist sunlight to entire hedge -	____	____
3. Determined time of year to shear and how much material can and/or should be removed -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are preformed successfully according to the supervisor.

Tools and Equipment:

Hand hedge shears
Electric hedge shears
Customer order

Resources:

Duty: Operating Temperature Controls

Duty No. J

Task No. 1

Task: Operate electric temperature controls, using knowledge of setting requirements and energy managements, to operate equipment.

Achievement Indicators: The learner:

	Yes	No
1. Identified system componentes and requirements -	____	____
2. Identified temperature setting required by task -	____	____
3. Located dials, switches, levers, knobs as required to perform settings -	____	____
4. Located timing devices for automatic start up, shut off or system cycle -	____	____
5. Set temperature as required by task -	____	____
6. Set timer as required by task -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the system and task requirements identified by the supervisor.

Tools and Equipment:

Resources:

Equipment Operating/Instruction Manual.

Teacher Activities	Student Learning Activities
Review - Ask students to identify equipment that required temperature settings. - Review and assess students ability to use and read temperatures through pre-test or other exercise.	Exercise - Have students identify and record product, fabric, and equipment information. - Have students practice the skills they have learned through simulated activities or performing related tasks.
Overview - Discuss outcomes of wrong temperature settings in relation to products, cost, and employment.	
Presentation - Present information from related product information and equipment operating manuals related to tasks. - Demonstrate proper procedures for setting equipment.	
Exercise - Provide prepared record sheets for student to record related product, fabric, or equipment information. - Demonstrate simulated activities or task procedures utilizing equipment and related products.	
Summary - Summarize what has been learned by relating it to other job tasks or skills and how it can be transferred to other skills or products.	

Duty: Operating Temperature Controls	**Duty No.** J **Task No.** 2

Task: Operate pneumatic temperature controls, using knowledge of system flow and setting requirements, to operate equipment.

Achievement Indicators: The learner:

	Yes	No
1. Identified system components and requirements -		
2. Identified temperature requirements necessary for task -		
3. Located dials, switches, levers, and/or knobs -		
4. Located timing devices for automatic startup, shutdown, or system cycle -		
5. Set temperature as required by task -		
6. Set timer as required by task -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the system and task requirements identified by the supervisor.

Tools and Equipment:

Resources:

Equipment Operating/Instruction Manual.

Duty: Performing Management Functions

Duty No. K

Task No. 1

Task: Control inventory, using knowledge of invoicing and stock management procedures, to maintain supplies.

Achievement Indicators: The learner:

	Yes	No
1. Identified placement of tool, equipment and product -	____	____
2. Identified forms used to record stock -	____	____
3. Identified forms and systems used to invoice and check out stock -	____	____
4. Located and filed all records -	____	____
5. Gathered and presented records for audit -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to requirements set forth by the supervisor.

Tools and Equipment:

Resources:

Local Invoice and Inventory Forms.

Teacher Activities	Student Learning Activities
Review - Ask students to list reason why it is necessary to perform inventory control. Overview - Tell what is to be taught and why it is important. Presentation - Discuss a variety of forms used as a means of controlling inventory. - Discuss the cycle or system of ordering, checking in, and removing item from inventory. - Demonstrate tagging and engraving procedures used and classifications of items cataloged. Exercise - Have student practice skills they have learned using related achievement indicators as a guide. Summary - Summarize by relating how skills learned relate to other jobs and/or job tasks and/or can be transferred to other skills.	Exercise - Have student review related audio-visual media. - Have student complete related text and/or workbook exercises. - Have student perform regular inventory procedures within the lab and/or building.

Duty:	Performing Management Functions	**Duty No.**	K
		Task No.	2

Task: Supervise staff, using knowledge of employee job responsibilities, evaluation procedures, and building needs, to manage staff.

Achievement Indicators: The learner:	Yes	No
1. Completed and maintained employee records -		
2. Communicated information to employees -		
3. Set up weekly work schedule -		
4. Developed and disseminated maintenance and cleaning schedule -		
5. Assigned work duties -		
6. Evaluated work completed -		
7. Ordered supplies and equipment -		
8. Completed daily, weekly, monthly records -		
9. Settled employee disputes/grievances -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to requirements set forth by the supervisor.

Tools and Equipment:	**Resources:**
	Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Performing Management Functions

Duty No. K

Task No. 3

Task: Plan work schedule, using knowledge of staff and building needs, to organization maintenance and staff schedule.

Achievement Indicators: The learner:

	Yes	No
1. Identified building cleaning and maintenance needs -	____	____
2. Identified employee schedule limitation -	____	____
3. Identified contract regulations -	____	____
4. Identified building traffic patterns -	____	____
5. Design work schedule to meet building needs -	____	____
6. Design back up for priority needs -	____	____
7. Post and/or dissemination schedule -	____	____
8. Make adjustments as required -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty:	Performing Management Functions	**Duty No.**	K
		Task No.	4

Task: Demonstrate troubleshooting techniques, using knowledge of equipment and systems operations, to adjust/diagnose/locate defective part.

Achievement Indicators: The learner:

	Yes	No
1. Located necessary equipment/procedural manuals -	_____	_____
2. Located building and building system blueprint -	_____	_____
3. Read/interpreted information from blueprint or schematics -	_____	_____
4. Interpreted information from charts, tables or schedules -	_____	_____
5. Read and interpreted system flowpath -	_____	_____
6. Located warranty information -	_____	_____
7. Used testing equipment to locate/diagnose problem area -	_____	_____
8. Determined replacement part needs or procedure for repair -	_____	_____
9. Contacted service representative for repair -	_____	_____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the requirements identified by the supervisor.

Tools and Equipment:

Blueprints/Diagrams
Electrical Tester
Basic Hand Tools

Resources:

Equipment Operating/Instruction Manuals.
Mix, Basic Electricity.
Slater and Smith, Basic Plumbing.

Duty:	Performing Management Functions	**Duty No.**	K
		Task No.	5

Task: Order supplies and materials, using knowledge of product information. requisitions, and purchasing procedures, to maintain stock.

Achievement Indicators: The learner:

	Yes	No
1. Identified forms and procedures for ordering supplies -	_____	_____
2. Completed general information section of requisition -	_____	_____
3. Used parts and supply catalogs to determine ordering information -	_____	_____
4. Used pricing catalogs to determine cost -	_____	_____
5. Determined discount percentages for mass orders -	_____	_____
6. Completed forms with all pertinent material and supply information -	_____	_____
7. Forwarded forms through purchasing department -	_____	_____
8. Checked in supplies at time of delivery - _	_____	_____
9. Accounted supplies to current inventory -	_____	_____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the requirements and procedures identified by the supervisor.

Tools and Equipment:

Resources:

Sample Requisition and Purchasing Forms.

Duty: Performing Management Functions

Duty No. K

Task No. 6

Task: Assign work schedule, using single and/or multi-building communications system, to disseminate weekly work/maintenance schedule.

Achievement Indicators: The learner:

	Yes	No
1. Identified building traffic and event schedule -	____	____
2. Assessed manpower needs -	____	____
3. Determined work schedule based on building needs and employee contract requirements -	____	____
4. Adjusted schedule based on employee feedback -	____	____
5. Planned vacation and holiday scheduling needs -	____	____
6. Disseminated/posted work schedule through appropriate system -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the supervisor's satisfaction.

Tools and Equipment:

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Performing Management Functions

Duty No. K

Task No. 7

Task: File records, using alphabetical and/or numerical system, to maintain files.

Achievement Indicators: The learner:

	Yes	No
1. Identified components of filing system -	____	____
2. Located records filed alphabetically -	____	____
3. Located records filed numerically -	____	____
4. Filed records alphabetically -	____	____
5. Filed records numerically -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to requirements set forth by the supervisor.

Tools and Equipment:

Resources:

Duty: Performing Management Functions

Duty No. K

Task No. 8

Task: Check/evaluate work completed, using knowledge of job tasks, health and safety standards, and equipment operations, to supervise building operations.

Achievement Indicators: The learner:

	Yes	No
1. Identified daily maintenance/cleaning schedule -		
2. Identified other cleaning/maintenance/repair task -		
3. Checked tasks completed against procedural steps -		
4. Evaluated quality of work -		
5. Evaluated productivity of employees -		
6. Measured work completed against health and safety requirements -		
7. Checked repaired equipment/systems for proper operation -		
8. Recorded daily and/or weekly records as required -		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to requirements set forth by the supervisor.

Tools and Equipment:

Sample Evaluation Forms

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Performing Management Functions

Duty No. K

Task No. [illegible]

Task: Record messages, using proper form(s) and routing procedures, to initiate delivery.

Achievement Indicators: The learner:

	Yes	No
1. Communicated proper greeting -	____	____
2. Listened for message -	____	____
3. Recorded and verified message -	____	____
4. Forwarded message as required -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to requirements set forth by the supervisor.

Tools and Equipment:

Message Slips
Routing Slips

Resources:

Duty: Performing Management Functions

Duty No. K

Task No. 10

Task: Operate office equipment, using appropriate procedures, manuals, and business forms, to record/calculate information.

Achievement Indicators: The learner:

	Yes	No
1. Completed forms and records using typewriter -	____	____
2. Typed letters and messages -	____	____
3. Calculated numerical data using a calculator -	____	____
4. Set time clock as required -	____	____
5. Used computer to access inventory and other record information -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the related equipment operating manuals.

Tools and Equipment:

Time Clock
Typewriter
Calculator
Telephone

Resources:

Equipment Operating/Instructional Manual.
Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Performing Management Functions

Duty No. K

Task No. 11

Task: Complete paperwork, using basic grammar and spelling skills, and knowledge of purpose and destination, to record information.

Achievement Indicators:

The learner:	Yes	No
1. Completed employee and maintenance schedule -	____	____
2. Completed requisition forms -	____	____
3. Checked in deliveries -	____	____
4. Routed information -	____	____
5. Recorded messages -	____	____
6. Calculated numerical data -	____	____
7. Answered letters and requests -	____	____
8. Prepared reports -	____	____
9. Filed records and information -	____	____
10. Utilized catalogs and manuals -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to a level of accuracy set forth by the supervisor.

Tools and Equipment:

Typewriter
Calculator
Business Forms
Pen/Pencil
Supply/Equipment Catalog

Resources:

Duty: Maintaining Facilities

Duty No. L

Task No. 1

Task: Maintain a residence, using knowledge of hand and power equipment, cleaning products, building materials, and installation and repair procedures, to clean/repair facility.

Achievement Indicators: The learner:

	Yes	No
1. Identified tasks necessary to maintain a residence -	____	____
2. Identified products and product information necessary to maintain a residence -	____	____
3. Performed daily, weekly, monthly cleaning tasks -	____	____
4. Operated power equipment to clean residence -	____	____
5. Identified repair/maintenance needs -	____	____
6. Identified seasonal maintenance needs -	____	____
7. Performed outdoor maintenance needs -	____	____
8. Identified ways to reduce cleaning needs -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the requirements set forth by the supervisor.

Tools and Equipment:

Cleaning Products
Cleaning Equipment (Hand)
Cleaning Equipment (Power)
Cleaning Supplies

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.
Weiss, Home Maintenance.

Teacher Activities

Review

- Divide students into groups. Give each one a facility. Have them list what equipment and products are necessary to maintain it.

Overview

- Tell what is important and what is to be taught. Relate to health, safety, and other factors (such as building life).

Presentation

- List tasks necessary to perform building maintenance.
- Discuss daily, weekly, and monthly scheduling of activities.
- Demonstrate how to clean items and facilities using appropriate equipment and supplies.

Exercise

- Have students practice the skills taught by performing simulated activities (see achievement indicators).

Summary

- Summarize how what has been learned relates to other job tasks or skills and/or how it can be transferred to other skills.

Student Learning Activities

Exercise

- Have students develop checksheets to use to plan and evaluate cleaning activities.
- Have students identify equipment, supplies, and products necessary to perform cleaning tasks.
- Have students perform cleaning task using necessary equipment, supplies, and/or products.

Duty: Maintaining Facilities

Duty No. L

Task No. 2

Task: Maintain industrial facilities, using knowledge of surface, equipment, and system needs, to clean/maintain building and components.

Achievement Indicators: The learner:

		Yes	No
1.	Identified duties and tasks necessary to maintain industrial facilities -	____	____
2.	Identified related cleaning and maintenance schedule for industrial facility -	____	____
3.	Identified equipment, products and product information necessary to maintain industrial facilities -	____	____
4.	Identified safety equipment and procedures necessary to perform task -	____	____
5.	Identified health standards/policies related to cleaning and maintenance tasks -	____	____
6.	Identified supervisory/management structure of general industrial facility -	____	____
7.	Completed forms and records as required -	____	____
8.	Proportioned products according to product information -	____	____
9.	Set up and operated hand/power equipment -	____	____
10.	Disassembled hand/power equipment -	____	____
11.	Cleaned and stored equipment -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the requirements set forth by the supervisor.

Tools and Equipment:

Cleaning Products
Cleaning Equipment (Hand)
Cleaning Equipment (Power)
Cleaning Supplies

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.
Weiss, Home Maintenance.

Duty: Maintaining Facilities

Duty No. L

Task No. 3

Task: Maintain health care facilities, using knowledge of cleaning/disinfecting procedures, patient relations, and isolation techniques, to insure health and safety standards.

Achievement Indicators: The learner:

	Yes	No
1. Identified duties and task necessary to maintain health care facilities -	____	____
2. Identified related cleaning and maintenance schedule for health care facilities -	____	____
3. Identified equipment, products, and product information necessary to perform cleaning/maintenance tasks -	____	____
4. Identified safety equipment and procedures necessary to perform tasks -	____	____
5. Identified health standards/policies related to cleaning/maintaining a health care facility -	____	____
6. Proportioned products according to product information -	____	____
7. Set up and operated hand/power equipment to perform tasks -	____	____
8. Disassembled hand and power equipment -	____	____
9. Cleaned and stored equipment and products -	____	____
10. Performed outdoor maintenance -	____	____
11. Completed forms and records as required -	____	____
12. Identified supervisory/management structures of a general health care facility -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the requirements set forth by the supervisor.

Tools and Equipment:

Cleaning Products
Cleaning Equipment (Hand)
Cleaning Equipment (Power)
Cleaning Supplies

Resources:

Sharpton, Coordinated Vocational Education and Training: Cleaning Services.

Duty: Maintaining Facilities	**Duty No.** L **Task No.** 4

Task: Maintain hospitality facilities, using appropriate equipment, products, and procedures, to meet building needs.

Achievement Indicators: The learner: Yes No

1. Identified duties and tasks necessary to maintain a hospitality facility - ____ ____
2. Identified related cleaning and maintenance schedule for hospitality facility - ____ ____
3. Identified equipment, products, and product information necessary to maintain hospitality facilities - ____ ____
4. Identified safety equipment and procedures necessary to perform tasks - ____ ____
5. Identified health and safety standards/policies related to cleaning and maintenance tasks - ____ ____
6. Set up tables, chairs, and platform structures for restaurant and banquet activities - ____ ____
7. Proportioned products according to product information - ____ ____
8. Set up and operated hand/power equipment to perform cleaning and maintenance tasks - ____ ____
9. Disassembled equipment and furniture - ____ ____
10. Cleaned rooms (wall, floor, furniture surfaces) - ____ ____
11. Changed/made beds - ____ ____
12. Completed forms and records as required - ____ ____
13. Stored equipment, products, linens - ____ ____
14. Identified supervisory/management structure of hospitality facility - ____ ____

Duty: Maintaining Facilities	**Duty No.** L **Task No.** 5

Task: Maintain educational facility, using knowledge of maintenance schedule, equipment operations, and calendar of events, to meet building needs.

Achievement Indicators: The learner:	Yes	No
1. Identified duties and tasks necessary to maintain educational facilities -	____	____
2. Identified equipment, products and product information necessary to pe-form cleaning/maintenance tasks -	____	____
3. Identified related cleaning and maintenance schedule for educational facility -	____	____
4. Identified safety equipment and procedures necessary to perform tasks -	____	____
5. Identified health standards/policies related to cleaning and maintaining an educational facility -	____	____
6. Proportioned products according to product information -	____	____
7. Cleaned and maintained resiliant and nonresiliant floor surfaces -	____	____
8. Cleaned/maintained wall and window surfaces -	____	____
9. Cleaned furniture and room equipment as required -	____	____
10. Removed and disposed of debris/trash -	____	____
11. Performed scheduled maintenance and repair needs -	____	____
12. Performed outdoor maintenance -	____	____
13. Completed forms and records as required -	____	____
14. Identified supervisory/management structure of a general educational facility -	____	____

Duty: Maintaining Facilities

Duty No. L

Task No. 6

Task: Maintain a commercial/business facility, using knowledge of cleaning requirements and building operation, to meet building and occupant needs.

Achievement Indicators: The learner:	Yes	No
1. Identified duties and tasks necessary to maintain a commercial/business facility -	____	____
2. Identified equipment, products, and product information necessary to perform cleaning and maintenance tasks -	____	____
3. Identified related cleaning and maintenance schedule for a commercial/business facility -	____	____
4. Proportioned products according to product information -	____	____
5. Cleaned/maintained floor surfaces -	____	____
6. Cleaned and maintained wall and window surfaces -	____	____
7. Cleaned furniture and room equipment as required -	____	____
8. Removed and disposed of trash and debris -	____	____
9. Performed scheduled maintenance -	____	____
10. Performed building repairs as required -	____	____
11. Performed outdoor maintenance -	____	____
12. Stored all products and equipment -	____	____
13. Completed forms and records as required -	____	____
14. Identified supervisory/management structures of a commercial/business facility -	____	____

Duty: Maintaining Facilities

Duty No. L

Task No. 7

Task: Maintain public buildings, using knowledge of maintenance schedule, equipment operations, and calendar of events, to meet building needs.

Achievement Indicators: The learner:	Yes	No
1. Identified duties and tasks necessary to maintain educational facilities -	_____	_____
2. Identified equipment, products, and product information necessary to perform cleaning/maintenance tasks -	_____	_____
3. Identified related cleaning and maintenance schedule for public facilities -	_____	_____
4. Identified safety equipment and procedures necessary to perform tasks -	_____	_____
5. Identified health standards/policies related to cleaning and maintaining a public building -	_____	_____
6. Proportioned products according to product information -	_____	_____
7. Cleaned/maintained wall and window surfaces -	_____	_____
8. Cleaned and maintained resiliant and non-resiliant floor surfaces -	_____	_____
9. Cleaned furniture and room equipment as required -	_____	_____
10. Cleaned restroom facilities -	_____	_____
11. Removed and disposed of debris/trash -	_____	_____
12. Performed scheduled maintenance and repair needs -	_____	_____
13. Performed outdoor maintenance -	_____	_____
14. Completed forms and records as required -	_____	_____
15. Identified supervisory/management structure of general public buildings -	_____	_____

Duty: Using Employability Skills

Duty No. M

Task No. 1

Task: Perform a self-assessment, using knowledge and information, to compile a list of personal attributes.

Achievement Indicators: The learner:

	Yes	No
1. Listed work-related accomplishments-	____	____
2. Listed non-work related accomplishments -	____	____
3. Identified skills and competency attainment -	____	____
4. Identified transferable (portable) skills -	____	____
5. Determined strengths and weaknesses -	____	____
6. Described job liabilities and the affect liabilities have on employment opportunities -	____	____
7. Developed a plan to overcome job liabilities -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:
Goodman, Jane, Judith Hoppin and Ronald Kent, "First Steps" in Opening Doors: A Practical Guide for Job Hunting. Continuum Center, Oakland University, 1984, pp. 7-14.

Duty: Using Employability Skills

Duty No. M

Task No. 2

Task: Perform a self-assessment, using knowledge and information, to identify areas of work that will provide personal job satisfaction.

Achievement Indicators:

The learner	Yes	No
1. Listed personal job values -	____	____
2. Rated each job value -	____	____
3. Listed enjoyable activities/interests -	____	____

Criteria: Competence in the taks will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:
Ibid, pp. 16-20

Duty: Using Employability Skills	**Duty No.** M **Task No.** 3

Task: Perform a self-assessment, using knowledge and information, to determine methods to reduce levels of stress.

Achievement Indicators: The learner:

	Yes	No
1. Identified stages of grief that result in stress -	____	____
2. Identified factors that reduced levels of stress -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Ibid. pp. 21-23.

Duty: Using Employability Skills

Duty No. M

Task No. 4

Task: Compile an occupational profile, using reference materials, to determine the characteristics, requirements, and employment outlook of an occupation.

Achievement Indicators: The learner:

	Yes	No
1. Described:		
a. Main job duties	____	____
b. Places of employment -	____	____
c. Physical demands -	____	____
d. Working (environmental) conditions -	____	____
e. Educational requirements -	____	____
f. Wage and fringe benefit information -	____	____
g. Local, regional and national employment outlook -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Dictionary of Occupational Titles (D.O.T.).

Goodman, Jane, Judith Hoppin and Ronald Kent, "Making Decisions," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 27-34.

Michigan Occupational Information System (M.O.I.S.

Duty: Using Employability Skills

Duty No. M

Task No. 5

Task: Investigate non-wage job characteristics, using available resources, to identify significant job factors.

Achievement Indicators: The learner

	Yes	No
1. Listed and described:		
a. Union affiliation -	____	____
b. Apprenticeship opportunities -	____	____
c. Occupational hazards -	____	____
d. Shift requirements -	____	____

Criteria:
Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:
Dictionary of Occupational Titles (D.O.T.).
Goodman, Jane, Judith Hoppin and Ronald Kent, "Making Decisions," in *Opening Doors: A Practical Guide for Job Hunting*, Continuum Center, Oakland University, 1984, pp. 27-34.
Michigan Occupational Information System (M.O.I.S.)

Duty: Using Employability Skills

Duty No. M

Task No. 6

Task: Develop goals, using knowledge, to determine career objective(s).

Achievement Indicators:

The learner:	Yes	No
1. Listed short-term goals	____	____
2. Listed long-term goals -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:
Ibid, pp. 30-31.

Duty: Using Employability Skills

Duty No. M

Task No. 7

Task: Perform a job search, using information, to identify employment opportunities.

Achievement Indicators: The learner:

	Yes	No
1. Determined geographic boundaries for job search -	____	____
2. Listed types of potential places of employment -	____	____
3. Developed a list of prime sources of information concerning opportunities for employment -- advertised and unadvertised -	____	____
4. Gathered information about advertised and unadvertised job openings -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppins and Ronald Kent, "Planning the Campaign," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 37-47

Duty: Using Employability Skills

Duty No. M

Task No. 8

Task: Participate in an information interview, using knowledge and resources, to obtain information about a job from an employer.

Achievement Indicators:

The learner:	Yes	No
1. Identified a job within the area of occupational interest -	____	____
2. Prepared a list of organizations that employ people to perform the identified job -	____	____
3. Scheduled an interview appointment with an employer at one of the organizations -	____	____
4. Prepared a list of questions for the interview -	____	____
5. Conducted the interview -	____	____
6. Prepared a follow-up letter to mail, after the interview, to the employer		

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent. "Planning the Job Campaign," Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 44-45.

Duty: Using Employability Skills	**Duty No.** M **Task No.** 9

Task: Complete a social security form, using information, to apply for a social security number.

Achievement Indicators: The learner:

	Yes	No
1. Contacted appropriate office to secure form -	____	____
2. followed instructions on form -	____	____
3. Filled in each space on the form with the correct information -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:	**Resources:** "Handling the Paperwork," Employability Skills Guide #6, MSU.

Duty: Using Employability Skills

Duty No. M

Task No. 10

Task: Contact an employer, using a telephone, to pursue potential employment opportunities.

Achievement Indicators:

The learner:	Yes	NO
1. Greeted receptionist -	____	____
2. Identified self and reason for phone call -	____	____
3. Asked to speak to appropriate person -	____	____
4. Arranged, if necessary, a time to call back -	____	____

Criteria: Competence in the takd will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppins, and Ronald Kent, "Communicating with Employers," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 54-57.

Duty: Using Employability Skills	**Duty No.** M **Task No.** 11

Task:
Complete a job application, using personal notes, to apply for employment.

Achievement Indicators:

The learner:	Yes	No
1. Followed the directions specified on the application form -	____	____
2. Filled in each space where applicable, with the correct information -	____	____
3. Used a pen or typewriter to fill in application information -	____	____
4. Filled out the application neatly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:	**Resources:**
	Goodman, Jane, Judith Hoppins and Ronald Kent, "Communicating with Employers," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 61-64

Duty: Using Employability Skills

Duty No. M

Task No. 12

Task: Prepare a resume, using personal information, to apply for a job.

Achievement Indicators:

The learner: Yes No

1. Listed name, address, and telephone number - ____ ____
2. Identified career objective - ____ ____
3. Listed work experiences ____ ____
4. Described job-related experiences - ____ ____
5. Provided information about education - ____ ____
6. Listed military experence, if acquired - ____ ____
7. Described home/community activities - ____ ____
8. Listed membership in work-related organizations/ associations - ____ ____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppins and Ronald Kent, "Communicating with Employers," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 58-59, 65-71.

Duty: Using Employability Skills

Duty No. M

Task No. 13

Task: Write a letter, using personal notes, to apply for a position.

Achievement Indicators: The learner:

	Yes	No
1. Included:		
a. Name, address, phone number -	____	____
b. Date -	____	____
c. Name, title, firm, address of person to whom the letter is being sent -	____	____
d. Salutation -	____	____
2. Indicated, in paragraph one:		
a. An awareness of the business -	____	____
b. A reference to an ability/skill that will benefit the company -	____	____
3. Emphasized experience, abilities, accomplishments in paragraph two -	____	____
4. Identified strenghts/special training in paragraph three -	____	____
5. Included a follow-up plan in paragraph four -	____	____
6. Included complimentary closing -	____	____
7. Signed letter -	____	____

Duty: Using Employability Skills	**Duty No.** M **Task No.** 14

Task: Demonstrate appropriate dress, using a knowledge of job requirements, to comply with standards of on-the-job attire and grooming.

Achievement Indicators: The learner:

	Yes	No
1. Described and/or dressed in the attire of the appropriate occupational area, including:		
a. Grooming -	____	____
b. Health and safety equipment -	____	____
c. Uniforms -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent, "The Job Interview," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 77-96.

Duty: Using Employability Skills

Duty No. M

Task No. 15

Task: Interview for a job, using communication skills, to secure employment.

Achievement Indicators: The learner:

	Yes	No
1. Demonstrated appropriate characteristics for job applicants including:		
a. Attire -	____	____
b. Grooming -	____	____
c. Conduct -	____	____
2. Demonstrated correct usage of interviewing techniques -	____	____
3. Prepared a list of questions to ask the interviewer(s) -	____	____
4. Prepared a follow-up letter to mail, after the interview, to the interviewer -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent, "The Job Interview," in Opening Doors: A Practicle Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 77-96.

Duty: Using Employability Skills

Duty No. M

Task No. 16

Task: Contact a job interviewer, using a telephone, to accept/reject a job.

Achievement Indicators:

The learner:	Yes	No
1. Spoke with interviewer who offered the job -	____	____
2. Identified self -	____	____
3. Accepted offer, if applicable -	____	____
4. Found out starting date and time, if appropriate -	____	____
5. Rejected offer courteously and politely, if applicable -	____	____
6. Gave reason for rejection, if applicable -	____	____
7. Concluded conversation correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

"Getting the Job," Employability Skills Guide #9, MSU.

Ibid, pp. 77-96

Duty: Using Employability Skills

Duty No. M

Task No. 17

Task: Complete forms, using information, to withhold city, state, and federal taxes.

Achievement Indicators: The learner:

	Yes	No
1. Completed city tax form correctly -	____	____
2. Completed state tax form correctly -	____	____
3. Completed federal tax form correctly -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Duty: Using Employability Skills

Duty No. M

Task No. 18

Task: Describe performance evaluation measurements, using knowledge, to identify behavior/attitudes that employers expect employees to exhibit on-the-job.

Achievement Indicators: The learner:

	Yes	No
1. Listed and described the methods to achieve successful working relationships -	_____	_____
2. Listed and defined importance of:		
a. Reliability -	_____	_____
b. Punctuality -	_____	_____
c. Quality -	_____	_____
d. Quantity -	_____	_____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:

Goodman, Jane, Judith Hoppin and Ronald Kent, "Opening the Door to Your Future." in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 99-100.

Duty: Using Employability Skills	**Duty No.** M **Task No.** 19

Task: Perform a continuing education program search, using available resources, to identify opportunities for retraining, skills upgrading, and career advancement.

Achievement Indicators: The learner:	Yes	No
1. Described types and sources of continuing education programs for an occupation -	____	____
2. Related information to career alternatives -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:	**Resources:**
	Goodman, Jane, Judith Hoopin and Ronald Kent, "Opening the Door to Your Future," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, P. 101.

Duty: Using Employability Skills	**Duty No.** M **Task No.** 20

Task: Analyze career information, using available resources, to identify the opportunities for advancement that exist within an occupation.

Achievement Indicators: The learner:	Yes	No
1. Described the career stages associated with the occupational area:		
a. Listed jobs, entry through advanced levels -	____	____
b. Gave examples of tasks that employees in the occupation are required to perform -	____	____
c. Identified tools/equipment that employees in the occupation use -	____	____
d. Made reference to the relationship of the job(s) to data, people, things -	____	____
e. Made reference to education and/or on-the-job training needed to attain career mobility -	____	____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to instructions.

Tools and Equipment:

Resources:

Dictionary of Occupational Titles (D.O.T.).
Goodman, Jane, Judith Hoppin and Ronald Kent, "Opening the Door to Your Future," in Opening Doors: A Practical Guide for Job Hunting, Continuum Center, Oakland University, 1984, pp. 99-102.
Michigan Occupational Information System (M.O.I.S.)

Duty: Using Employability Skills

Duty No. M

Task No. 21

Task: Describe job resignation/dismissal practice, using knowledge, to identify positive methods for terminating an employment situation.

Achievement Indicators: The learner: Yes No

1. Described practices for resigning from a job:
    a. Gave two weeks to a months notice - ____ ____
    b. Specified a positive reason for leaving the employment situation - ____ ____
2. Described practices for job dismissal (laid off, released):
    a. Asked the employer for a letter of reference, if laid off - ____ ____
    b. Talked with the employer to discover what was the problem, if released - ____ ____

Criteria: Competence in the task will be recognized when the achievement indicators are successfully performed according to the instructions.

Tools and Equipment:

Resources:
"Knowing the Score," Employability Skills, Guide #10, MSU.

TOOL AND EQUIPMENT LIST
FOR
BUILDING AND HOME MAINTENANCE AND SERVICES

Item Number	Quantity	Item Description	Duty
1	2-4	Vacuum cleaner - upright	A C L
2	2-4	Vacuum wet and dry	A B C L
3	1	2-caddy vacuum	A B C D I L
4	1	Product proportioner	A B C D L
5	4 each	Housekeeping/custodial cart with tools	B D L
		Mop buckets	
		Mop wringers	
6	2	Ladders - 6'	D F G H L
7	2	Ladders - 8'	D F G H L
8	1	Extractor	A C L
9	1	Carpet scrubber	A C L
		Lambswool applicator	B D L
10	4 each	Long handled duster	B D L
		Short handled duster	B D L
		Brushes - gong, bottle, and perculator	D L
		Caddy cart with bowl brush	D L
		Dust pans	B D L
11	4	Dustmops with handle	B D L
12	4	Wetmops with handle	D L
13	4	Wall washing bucket	B D L
14	4 each	Squeege - floor, window	B D L
15	4 - 9 each	Brooms	B D L
		Push brooms	
		Corn brooms	
		Whisk brooms	

Item Number	Quantity	Item Description	Duty
16	2 - 4 doz.	Atomizers	D L
17	2 - 4 doz.	Cleaning cloths	D L
18	2	Baseboard brushes	D L
19	2	Wire brushes	D L
20	4	Funnels	B C D L
21	4 sets	Measuring cups	B C D L
22	4 - 8	Putty knives	B F
23	4	Waste containers	D L
24	2	Wet floor signs	B C L
25	4 doz.	Dustclothes	D L
26	4	Razor blade scraper	F L
27	4	Dropcloths	F
28	1	Grinder	A F
29	1	Table saw	A F
30	1	Speed bits (wood)	F H L
31	4	Squares	F L
32	4	Levels	F G L
33	4	Dividers	F L
34	4	Marking gauges	F L
35	4	Planes	F L
36	1 set	Chisels	F G L
37	1 set	Paint brushes	F L
38	4	Plungers	G L
39	1	Auger Snake	G L
40	1	Voltage tester	H L
41	1	Soldering gun	H L
42	1	Wire Stripper	H L

em Number	Quantity	Item Description	Duty
43	1	Circut Tester	H L
44	2	Electrician pliers	H L
45		Conduit blender	F L
46	1 set	Paint brushes	F L
47	1 set	Rollers with frames and pans for long and short nap	
48	1 set	Screwdrivers	F G H L
49	1 set	Pliers	F G H L
50	1 set	Wrenches (assorted)	F L
51	1 set	Hammer	F G H L
52		Hacksaw	F G L
53	1	Hand drill	F G H L
54	1	Power sander	F L
55	1	Router kit	F L
56	1	Electric drill/drill index	F G H L
57	1	Circular saw and blades	F L
58	1	Sabre saw	F L
59	1	Router with bits and table/guides	F L
60		Brace and bits	F G H L
61		Wood clamps	F L
62		C clamps	F L
63		Pipe clamp	G L
64		Pipe vice	G L
65		Propane torch tip	G L
66		Spark lighter	G L
67		Flaring/swag-kit	G L
68		Pipe taps	G L

Item Number	Quantity	Item Description	Duty
69		Pipe dies	G L
70		Pipe cutter.	G L
71		Tubing cutter	G L
72		Pipe reamer	G L
73		Architec's scale	F L
74		Tape measure	F G H L
75		Dry wall knife 8' 10'	F L
76		Flammable material	E F G I L
77		Storage cabinet	
78		Miter saw guide	F L
79		Welding leather glove	F G L
80		Helmets	F G L
81		Chipping hammers	F G L
82	1 - 2	Storage unit	E L
83	1	Double sink with storage	E L
84	1	Sorting table	E L
85	4	Steam/dry irons	E L
86	4	Ironing boards with pads	E L
87	2	Laundry carts	E L
88		Needles	E L
89		Thimbles	E L
90		Sewing shears	E L
91	1	Tub with shower	G L D
92	1	Toilet	G L D
		Ball type	G L D
		Diaphram Type	G L D
		Urinal/diaphram Flush	G L D

n Number	Quantity	Item Description	Duty
93	1	Sink	D G L
94	1 doz.	Bath linens (optional)	E L G
95	1	Tanle (seat 8-12)	D L
96	8-12	Chairs	D L
97	1	Sink	G D L
98	1	Stove	A D J L
99	1	Refrigerator	A D J L
100		Garbage disposal	A G L
101	1	Sofa-upholstered	D L
102	2	Chairs-upholstered	D L
103	1	Rug 9' X 12' or carpeted area	D L
104	1	Coffee table	D C L
105	2	End tables	D L
106	2	Lamps	H L
107	1	Bed with boxsprings and mattress	E
108	1	Dresser with mirror	D
109	1	Night stand	D
110	1	Chair	D
111	1	Lamp	D
112	4 sets	Bed linens	E
Over $300			
1	4-8	Floor machine and accessories	A B L
2	1-2	Battery charger and automatic scrubbing machine	A B C L
3	1	Pressure washer	A D L
4	1	Drill press	A F
5	1	Tap and die set	G L F
6		ARC Welder	G L

Over $300 (cont.)

Item Number	Quantity	Item Description	Duty
7		Ventilation System	G L
8		Oxyacethylene tank	F G L
9		Torch set	F G L
10	1	Commercial washer	A E J L
11	1	Commercial dryer	A E J L
12	1	Washer - Heavy duty	A E J L
13	1	Dryer - heavy duty	A E J L
14	1	Patching machine	A E L
15	1	Flat ironer	A E J L
16	1	Sewing machine (optional)	A E L
17		Forced air Furnace	F L K
18		Water Heater	G L K
19		Air conditioning unit	G L
20		Drinking fountain (refridgerated)	G L K
21		Typewriter	K
22		Calculator	K
23		Telephone trainer	K

STUDENT ACHIEVEMENT RECORD

STUDENT ______________________________

INSTRUCTIONS:

Mark each student's level of competence according to the following guide:

LEVEL	GUIDE
1	Student has been exposed to task
2	Task accomplished with assistance
3	Task accomplished to criteria by student
4	Ability to teach or demonstrate the task to others

TASK	LEVEL	DATE
A. OPERATING AND MAINTAINING EQUIPMENT		
1. Select equipment and tools/products.		
2. Use brooms.		
3. Use dust and wet mops.		
4. Set-up a housekeeping/custodial cart.		
5. Operate automatic scrubbing machine.		
6. Operate wet/dry vacuum.		
7. Operate an upright vacuum.		
8. Operate floor buffing machine.		
9. Operate hot water extraction equipment.		
10. Use product proportioner.		
11. Operate a caddy vacuum.		
12. Operate a power washer.		
13. Operate a commercial washer and dryer.		
14. Operate a flat iron.		
15. Operate a steam/dry iron.		

TASK	LEVEL	DATE
A. OPERATING AND MAINTAINING EQUIPMENT (continued)		
16. Operate a patching machine.		
17. Operate hand tools.		
18. Operate power tools.		
19. Use fasteners/hardware/adhesives.		
20. Operate a power auger.		
21. Store tools and material.		
B. CARING FOR RESILIANT AND NONRESILIANT FLOORS		
1. Identify floors.		
2. Wet scrub floors.		
3. Strip a floor.		
4. Seal a floor.		
5. Wax a floor.		
6. Finish a floor.		
7. Spray-buff a floor.		
8. Maintain floor finishes.		
C. CARING FOR CARPETED FLOORS		
1. Remove carpet stains.		
2. Spot clean carpets.		
3. Vacuum carpet.		
4. Shampoo carpet.		
5. Clean carpet by extraction.		
6. Clean carpet with roto floor machine.		
D. MAINTAINING SURFACES		
1. Follow cleaning schedule.		
2. Clean glass surfaces.		
3. Wash windows.		
4. Clean leather surfaces.		
5. Clean wood.		
6. Clean porcelin.		
7. Dust walls.		

TASK	LEVEL	DATE
D. MAINTAINING SURFACES (continued)		
8. Wash walls and ceilings.		
9. Clean appliances.		
10. Clean and replenish dispensers.		
11. Remove graffiti.		
12. Disinfect surfaces.		
13. Maintain germ free environment.		
14. Collect and empty trash.		
15. Demonstrate bedmaking.		
16. Clean upholstered surfaces.		
17. Clean stairs.		
18. Clean water fountains.		
19. Clean sand and dry urns.		
20. Report repair needs/hazards.		
21. Clean light fixtures.		
E. PERFORMING LAUNDRY OPERATIONS		
1. Pretreat and remove stains.		
2. Sort laundry.		
3. Make minor repairs.		
4. Wash fabric.		
5. Dry laundry.		
6. Fold laundry.		
7. Press laundry.		
8. Store solutions and soaps.		
F. PERFORMING BUILDING REPAIRS		
1. Measure/calculate materials.		
2. Patch holes in plastered walls.		
3. Repair damaged ceiling tile.		
4. Repair damaged floor tile.		
5. Repair carpet.		
6. Repair windows.		
7. Replace windows.		

TASK	LEVEL	DATE
F. PERFORMING BUILDING REPAIRS (continued)		
8. Repair a screen.		
9. Replace screen.		
10. Repair pain on interior and exterior surfaces.		
11. Maintain heating and cooling system.		
12. Repair/install locksets.		
13. Repair furniture.		
14. Repair drywall.		
15. Repair/install paneling.		
16. Apply/repair wallpaper.		
17. Repair door/jambs.		
18. Apply pesticides.		
19. Control rodents.		
G. PERFORMING PLUMBING REPAIRS		
1. Identify pipe sizes and schedules.		
2. Identify fitting.		
3. Cut pipe.		
4. Join pipe.		
5. Replace seal washers.		
6. Install watercloset.		
7. Install sink.		
8. Repair faucets.		
9. Repair ball-type flush valve.		
10. Repair diaphragm flush valve.		
11. Repair a water heater.		
12. Repair a drinking fountain.		
13. Repair a disposal.		
14. Unclog drains.		
15. Install waste pipe system.		
H. PERFORMING ELECTRICAL REPAIRS		
1. Select electrical tools and materials.		
2. Practice electrical safety procedures.		

TASK	LEVEL	DATE
H. PERFORMING ELECTRICAL REPAIRS (continued)		
3. Replace plugs on electrical cords.		
4. Install single pole switches and receptacles.		
5. Replace fluorescent light.		
6. Install 3-way light switches.		
7. Wire pig tail.		
8. Wire breaker/panel.		
9. Wire electric motors.		
10. Troubleshoot circuits.		
I. MAINTAINING GROUNDS		
1. Cut lawn.		
2. Seed lawn.		
3. Apply weed killer.		
4. Water lawn.		
5. Fertilize lawn.		
6. Clean parking area.		
7. Prune large trees.		
8. Prune deciduous shrubs.		
9. Prune narrow leaf evergreens.		
10. Prune broad leaf evergreen.		
11. Prune hedges.		
J. OEPRATING TEMPERATURE CONTROLS		
1. Operate electric temperature contols.		
2. Operate pneumatic temperature controls.		
K. PERFORMING MANAGEMENT FUNCTIONS		
1. Control inventory.		
2. Supervise staff.		
3. Plan work schedule.		
4. Demonstrate troubleshooting techniques.		
5. Order supplies and materials.		
6. Assign work schedule.		

TASK	LEVEL	DATE
K. PERFORMING MANAGEMENT FUNCTIONS (continued)		
7. File records.		
8. Check/evalualte work completed.		
9. Record messages.		
10. Operate office equipment.		
11. Complete paperwork.		
L. MAINTAINING FACILITIES		
1. Maintain a residence.		
2. Maintain industrial facilities.		
3. Maintain health care facilities.		
4. Maintain hospitality facilities.		
5. Maintain educational facility.		
6. Maintain a commercial/business facility.		
7. Maintain public buildings.		
M. USING EMPLOYABILITY SKILLS.		
1. Perform a self-assessment, to compile a list of personal attributes.		
2. Perform a self-assessment, to identify areas of work that will provide personal job satisfaction.		
3. Perform a self-assessment, to determine methods to reduce levels of stress.		
4. Compile an occupational profile.		
5. Investigate non-wage job characteristics.		
6. Develop goals.		
7. Perform a job search.		
8. Participate in an information interview.		
9. Complete a social security form.		
10. Contact an employer.		
11. Complete a job application.		
12. Prepare a resume.		
13. Write a letter.		
14. Demonstrate appropriate dress.		

TASK	LEVEL	DATE
M. USING EMPLOYABILITY SKILLS (continued)		
15. Interview for a job.		
16. Contact a job interviewer.		
17. Complete forms.		
18. Describe performance evaluation measurements.		
19. Perform a continuing education program search.		
20. Analyze career information.		
21. Describe job resignation/dismissal practice.		

CLASS ACHIEVEMENT RECORD

NAME TASK No.																					

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933 Electrical Housewiring
1066 Installing Plastic Laminate Counter Top
1094 Components of AC Circuits
1067 Stairs
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JBE 006	Replacing a Single Pole Switch
JBE 007	Replacing a Duplex Receptacle
JBE 008	Installing a Dimmer Switch
JBE 009	Installing a GFI Receptacle
JBE 010	Installing a Grounded Plug

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JBP 001	Replacing a Faucet Washer
JBP 002	Repairing a Washerless Faucet
JBP 003	Soldering Copper Tubing
JBP 004	Flaring Copper Tubing
JBP 005	Cutting and Threading Pipe
JBP 006	Replacing a Float Ball and Flush Ball
JBP 007	Replacing a Ball Cock Plunger Washer
JBP 008	Installing a New Ball Cock
JBP 009	Replacing Tank to Bowl Gasket

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